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OF THE

Director-General of Archæology in India.

654

1918-19.

BY

SIR JOHN MARSHALL, Kt., C.I.E., Litt. D., M.A., F.S.A., Hon. A.R.I.B.A.,
Director-General of Archæology in India.

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654

TABLE OF CONTENTS.

	Page.
Introduction	1
Conservation—	
Muhammadan and British Monuments.—Delhi	1
,, ,, ,, ,, —Punjab	3
,, ,, ,, ,, —United Provinces	4
Hindu and Buddhist Monuments.—United Provinces	4
,, ,, ,, —Punjab (with Taxila)	5
Frontier Circle (including Jaulian)	5
Bombay	6
Bengal	7
Assam	7
Bihar and Orissa	7
Central Provinces	8
Madras	9
Burma	10
Hyderabad	12
Gwalior	12
Kashmir	13
Sanchi	13
Exploration—	
Sarnath	13
Katas	15
Bihar and Orissa	16
Western Circle	17
Nagansur	17
Un	17
Madras	18
Burma	19
Kashmir	20
Hyderabad	21
Gwalior	21
Bikaner	22

	Page.
EPIGRAPHY—	
Sanskritic Epigraphy	23
Moslem ,,	28
ARCHÆOLOGICAL CHEMIST	29
MUSEUMS	30
FRESH ACQUISITIONS	31
LISTING OF MONUMENTS	32
ANCIENT MONUMENTS PRESERVATION ACT	33
TREASURE TROVE	33
TOURS	33
PUBLICATIONS	33
LIBRARY	34
PHOTOGRAPHS	34
PERSONNEL	34
SCHOLARSHIPS	35
APPENDICES	from p. 36

LIST OF PLATES.

PLATE I.—(*a*) Hayatbaksh garden in the Fort, Delhi; (*b*) Hayatbaksh garden in the Fort, Delhi.

" II.—(*a*) Sarnath: Monastery III, before conservation from N.-W.; (*b*) Sarnath: Monastery III, after conservation, from N.-E.

" III.—(*a*) Tomb in the Dutch cemetery, from north, at Kalikapur, District Murshidabad; (*b*) Sadi Mosque at Agarsindur, District Mymensingh.

" IV.—(*a*) General view of the Fort, river side, at Burhanpur, District Nimar; (*b*) Nearer view of palace inside the fort at Burhanpur, District Nimar.

" V.—(*a*) King's Palace, South elevation, Chandragiri, Chittoor; (*b*) Queen's Palace, front elevation, Chandragiri, Chittoor.

" VI.—(*a*) Pyatthat No. 41, Fort walls, Mandalay; (*b*) Main staircase, Great Stupa, Sanchi.

" VII.—The great stupa at Sanchi, restoration of the berm in progress.

" VIII.—(*a*) Sarnath: Excavations in Eastern portion of enclosure of Main Shrine, view after excavation and conservation, from S.-W.; (*b*) Sarnath: Excavations in Eastern portion of enclosure of Main Shrine, view of Buddhist temple after conservation, from W.

" IX.—(*a*) Image of Vajrasattva unearthed at Sarnath; (*b*) Sunga column at Rajasan.

" X.—(*a*) Stone axe-heads found near Kyauksauk village, Myaing Township, Pakokku District; (*b*) Glazed earthenware bowls and vases found at Ankare, Kyaikmaraw Township, Amherst District.

" XI.—(*a*) & (*b*) Tiles from the site of Harichand Raz, near Harvan (Kashmir).

" XII.—(*a*) A doorframe in Vindhyavasini Devi Temple at Tumain, Gwalior State; (*b*) Two pillars in the Vindhyavasini Devi Temple at Tumain, Gwalior State.

" XIII.—(*a*) Image of Balarama at Tumain, Gwalior State; (*b*) An inscribed monolith at Tilori, Gwalior State; (*c*) A tall Sati pillar at Kolaras, Gwalior State; (*d*) Image of Kartikeya at Ranod, Gwalior State.

" XIV.—(*a*) Torso of terracotta statue from Pir Sultan; (*b*) Pillar of ground balustrade from Munda.

Annual Report of the Director-General of Archæology in India, 1918-19.

ALL things considered, the work of the Archæological Department during the year 1918-1919 was satisfactory, and good progress is recorded throughout the country despite the depletion of our staff owing to the War. As several of our best men were absent on this account, the effect was bound to be felt, particularly in the domain of conservation. Funds, too, were still low, and owing to the rigid economy which had to be practised, conservation throughout the period under report was almost exclusively restricted to the maintenance of buildings and a few specially urgent repairs. Similarly, excavation work was almost at a standstill for lack of funds; but, on the other hand, the officers of the Department were afforded more time than usual for general research and epigraphy, with proportionate results.

Conservation. Northern Circle. (Muhammadan and British Monuments.) Delhi.

From the point of view of Conservation, the most important office of the Archæological Department is at Agra, and of the three Provinces served by the Superintendent of Muhammadan and British Monuments the one claiming most attention at present is the Delhi Province. Thus, out of a total expenditure by this office of more than a lakh and a third, a sum of Rs. 71,831 was devoted to conservation works in the Delhi area. This amount was almost evenly divided between works carried out under the head of Annual Repairs and works of Special Repair, the latter numbering twenty estimates in the Delhi Province alone, against eleven in the United Provinces and thirteen in the Punjab, without counting, of course, the works undertaken by the Lahore Office, which concerns itself with Hindu and Buddhist memorials exclusively. Of the twenty estimates referred to, the heaviest single one was that for Rs. 12,012 for work at the Naubat Khana in the Delhi Fort, which included the equipment and furnishing of the building as a War Museum. For this purpose glazed screens appropriate to the design of the old structure were provided in the open columnar bays of the upper storey, and the opportunity was also taken to dismantle modern additions and make good again the old features which had suffered on a previous occasion when the monument was converted into an Officers' Mess. Another important

project carried out during the year was the laying out of the Hauz Khas grounds and the acquisition of a well in the neighbourhood, for their maintenance. In accordance with the principles followed at so many of the Muhammadan monuments, (*e.g.*, in the Delhi Fort, *cf.* Plate I), the grounds have been laid out with lawns and trees planted on formal lines, the lawns in such cases being a concession to modern taste about the wisdom and propriety of which opinions are not likely to differ. In the Qutb area the late Mughal Bagh in the north-east corner was similarly laid out in grass lawns and parterres at a cost of Rs. 768, and at a further expenditure of Rs. 668 arrangements were made for watering the same. Here, too, the marble memorial sundial designed by Mr. Page in memory of 2nd-Lieutenant Gordon Sanderson, late Superintendent of the Agra Office, who was killed in action in France early in the War, has now been completed and set up on the lawn adjoining the Qutb enclave, the scene of so much useful and successful work by Mr. Sanderson. At Firoz Shah's Fort a scheme for the planting of trees so as to screen the ugly gaps in the old citadel walls has also been put in hand, and another scheme is under consideration for the Khairpur area. Another somewhat similar task which Mr. Page has had in hand at Delhi is the layout of the garden at Safdar Jang. "Broad effects are aimed at conformably to the architectural mass, and colour effect is to be economically attained by the planting of massed clumps of flowering shrubs to emphasise the main architectural features of the garden." Mr. Page adds that a margin of small fruit trees and flowering varieties is to be planted around the walls, to enclose the formal lawns. At the Bijai Mandal, Delhi, a sum of Rs. 1,815 has been expended on underpinning a badly ruined pavilion and securing other dilapidated portions of the main structure, while the surroundings also have been tidied up and improved. Adham Khan's tomb at Mehrauli has been retrieved from its previous use as a Police Rest House, sundry accretions have been dismantled, and the building has undergone other necessary repairs. At Humayun's tomb a substantial sum has been expended on the renovation of the old cattleyard attached to the garden, which it is proposed to utilise again for its original purpose in connection with the upkeep of the garden, and the interesting tomb of Darya Khan at Kotla Mubarakpur, which was in a very dilapidated condition, has been underpinned and put into thorough repair. The walls of the Bu Halima Garden at the Arab Sarai have also been underpinned here and there and pointed up where there were open joints in the masonry; and repairs have been carried out to the exterior wall of the Purana Qila as well as to the underground Hammam. At the Dargah of Hazrat Nizamu-d-Din Aulia and Khwaja Amir Khusru, Rs. 2,851 have been laid out on conservation and the unusual item of redecoration. "The principal work here," Mr. Page writes, "is the re-painting of the domed interior and of the exterior walls of the shrine of Nizamu-d-Din Aulia, the faded designs and patterns remaining from the last occasion of its embellishment in the time of Muhammad Shah being carefully followed in the new work, as far as feasible. It should be mentioned that this work, which admittedly goes

beyond the limits set by the Archæological Department to measures of conservation desirable on purely archæological grounds, is being undertaken at the special desire of the Pirzadas of the shrine, who are concerned rather with the embellishment of the shrine as a religious edifice than with its conservation as a monument of historical importance." Another monument little known to the public but of great historic interest, which received attention in the year under review, was the tomb of the first, and indeed, only Muhammadan Queen of India—Raziya, the daughter of Altamsh. Where so many of the kings of India, and even local kings of petty kingdoms, repose in stately mausoleums, it is an irony of Fate that the only Queen of Delhi should lie in so austere and severely plain a funeral mound as is the tomb of Raziya. This being so, it seems all the more desirable that all which reverence can accomplish should be done to honour the last resting-place of this unhappy but heroic lady, whose brief reign (1236-1240) forms so romantic a page in the annals of India, and it is good to know and to record that the slight measures of conservation which were needed have been duly carried out.

Punjab. Out of the Rs. 26,275-8-3 spent on the conservation of Muhammadan and British monuments in the Punjab, Rs. 18,000 odd were devoted to annual repairs and only some eight thousand to special works. Among the most noteworthy of the latter was the acquisition of the Begam-ki-Sarai, in the Attock District. This is one of the early Mughal sarais erected along the main Badshahi route across India from Bengal, and although the building is now very dilapidated, what remains of it well merits conservation. One of the large piers buttressing the rear of the Gujari Mahall (in Hissar District), which had subsided, has been underpinned, and repairs have been effected to Sheikh Chilli's Tomb, the tomb of the Saint's mother and to the Pathar Masjid at Thanesar, in the Karnal District. Here the repairs consisted principally in pointing the open jointing in the marble walls and dome, removing oil stains and scribbling from the interior, and clearing the thickly growing jungle from the enclosure. At the Pathar Masjid the work comprised the removal of some mounds of earth abutting against the mosque walls. At Shahdara, near Lahore, a small sum has been spent on the more urgent works necessary to preserve the range of little chambers around the enclosure of the Akbari Sarai, and in taking up and replacing with grass an inappropriate cinder track in front of them. Three small estimates have also been dealt with in connexion with the maintenance of the Shalamar Garden at Baghbanpura, where missing stone brackets to support an upper balcony were replaced in the north-east corner pavilion of the first terrace, and the incongruous modern piers which had previously served this purpose were dismantled. A dilapidated dome of this pavilion was also repaired, and the little Sikh pavilion on the same terrace was re-roofed, the decaying portion of the panelled ceiling being renewed. The other measures carried out at this site do not call for special comment, but it is to be recorded that a memorial designed by the Consulting Architect to the Punjab Government and bearing an inscription stone, has been constructed, at a cost of some seven hundred rupees, to mark the site of Buddhu-

ka-Awa, where stood the residence of General Avitabile, the Italian officer in the service of Ranjit Singh. An interesting work on which Mr. Page has been more personally concerned is connected with the conservation of the Hiran Munara at Sheikhupura, near Lahore. At this site a sum of Rs. 1,829 has been spent this year on repairs to the buildings, the tank, and the tower. Missing steps at the bottom of the latter have been rebuilt to connect with the interior flight up to the top, and undermined portions of the ruined plinth have been underpinned. Such fragments of plaster as remain have been secured by a fillet around the edges, and the concrete floors of the several *baradaris* about the tank have been made good, as well as the dilapidated portions of the tank platform. It is hoped that, once the monuments at Sheikhupura are put in a sound condition, they may be enclosed by a garden laid out on Mughal principles of design, and Mr. Page has already prepared complete working drawings giving details of the planting for the area around the great tank and Munara.

United Provinces.

In the United Provinces the small sum of Rs. 38,660-5-6 was provided for the maintenance and repair of Muhammadan and British Monuments, and among the few special estimates which could be funded during the year, there is only one of sufficient importance to merit notice, namely, the underpinning of the brick face of the river wall of the old Mughal garden known as the Bagh Khan-i-Alam, which is now in use as a nursery for the Taj gardens. On this project a sum of Rs. 3,094-13-0 was expended, this being the largest single item on Mr. Page's list for the year.

(Hindu and Buddhist Monuments.) United Provinces.

In the preservation of Hindu and Buddhist monuments, also, relatively little progress was made in the United Provinces. Indeed, Deogarh in the Jhansi District, the excavated site of Sarnath near Benares, and Dwarahat in the Almora District are the only places at which special estimates were taken up, and of these three groups of monuments those at Dwarahat came in for some minor measures of repair only. "At Sarnath," writes the Superintendent, "the large heap of earth and débris which concealed the middle portion of the inner courtyard of Monastery No. 1 was cleared away, and all architectural members thus disclosed were neatly arranged. The east boundary wall of the first court to the east of the main block was followed up to its end on the north, and the remains of Monastery III were thoroughly conserved. This involved dismantling and rebuilding certain portions, and extending the excavation of the courtyard (*cf.* Plate II). Necessary in any case, this digging was specially desirable for the sake of the old bricks thus obtained which were utilized in the repairing of the walls, etc. In the *nala* on the north side, also, two more cells of the west row of the monastery were disclosed. Similarly, four new cells in the north wing of Monastery IV were unearthed and suitably conserved, and the *nala* to the north of this building was improved and excavated up to the *jhil* so as to drain off rain-water from the monastic area." A further tract to the east of the Main Shrine was also excavated by Rai Bahadur Daya Ram Sahni in connexion with the drainage of the area in front of and around the Main Shrine. His excavations here

disclosed a brick-built shrine, a long *chankrama*, and a number of *stupas*, seven of which are built of stone. Two of these have now been completely repaired. Incidentally it may be mentioned that this digging also yielded an interesting image of Vajrasattva, seated, and another of Siva. At Deogarh attention was divided between the Jain temples and the Hindu temple of the Gupta period. For the latter a new compound wall has been constructed, which was nearly finished in the year under report, while in the case of the Jain temples the chief items were repairs to the roofs, which were made water-tight, rebuilding certain fallen walls, and the reclamation of images from the débris.

Punjab.

Of the more ancient Hindu and Buddhist monuments in the Punjab to which special repairs were carried out, the most noteworthy were the semi-Kashmirian temple and gate-way at Malot in the Jhelum District. Among the main achievements of the year at Taxila were the conservation, involving much underpinning and waterproofing, of the walls of four more blocks of buildings fronting the High Street in the Parthian city of Sirkap; the repair of the berm around the great Dharmarajika Stupa, and the levelling and dressing of the site on which this monument stands; the relaying of the floor in the main court at Jaulian; the removal and refixing of many of the stucco and clay reliefs of the stupas and monastery on the same site, and the provision of verandah roofs for the protection of the smaller stupas, and of doors and shutters to safeguard the groups of images in the wall niches. Besides the above a police-post and a godown for the storage of materials have been erected near the local offices, and good headway has been made in the construction of metalled roads to the Dharmarajika stupa on the one side and to Sirkap, Mohra Moradu and Jaulian on the other. At Malot, the work actually carried out consisted of repairs to the hole in the ceiling, the under-pinning of dilapidated masonry in the north wall of the gate-way, and some other minor operations. The completion of the project must await further allotments of funds. The temples at Masrur have now, also, been completely conserved, but the only work carried out during the year under review has been the cleaning of the temples with Szerelmey stone fluid and the under-pinning of certain masonry. Similar measures were also carried out at the temples of Baijnath.

Frontier Circle.

The stupas and monastery of Jaulian referred to in the last paragraph, as well as several other monuments at Taxila, fall actually within the boundary of the Hazara District, and I have to thank Mr. Natesa Aiyar, Superintendent of the Frontier Circle, for the help which he gave me over their conservation no less valuable than that which he had previously given me over their exca-vation. Apart from this work at Taxila, Mr. Natesa Aiyar also gave such attention as was possible in the disturbed state of the Frontier to the Bud-dhist ruins at Takht-i-Bahi. Work here was begun late in the year, but the more important items on the programme have been carried out, including the erection of an iron railing around the many little stupas in Court XX which had been previously roofed over, and the protection of Court IX by

building up and closing the two breaches in the north-west and the south-west corners. In the course of these repairs another deep courtyard measuring 33′×35′ was discovered and cleared in the middle of the monastic quadrangle, and the earth obtained from it proved very useful in the conservation of the neighbouring walls. At Jamalgarhi the main group of Buddhist monuments was cleared of débris and vegetation, and an approach-road, six feet wide, has been carried from the summit to the base of the hill on the east side of the site, which has thus become easily accessible.

Bombay.

In the Bombay Presidency, thanks largely to the efforts of Mr. Rakhal Das Banerji, Superintendent in the Western Circle, the year's record of conservation work has been a particularly good one. "The largest amount of work," says Mr. Banerji, "was done at Champanir, where Rs. 11,441 were utilised on special conservation measures. The major portion of the back wall of the Kevda Masjid, which had collapsed in September 1917, was rebuilt and strengthened. The back wall of the Lila Gumbaz was on the point of collapsing, and had to be partly dismantled and rebuilt. A special grant of Rs. 5,000 and an increase of Rs. 10,000 in the annual outlay on the conservation of ancient monuments by the Government of Bombay enabled the Public Works Department to finish the special repairs to these two monuments speedily, and thus save them from utter ruin. At Bijapur, support arches have been constructed under all the auxiliary arches outside the Ibrahim Roza proper, which are designed to carry the delicately carved flat-arched roof of the lower verandah. By Resolution No. A-8351, Public Works Department, dated 23rd August 1918, the Government of Bombay were pleased to hand over the Jod Gumbaz, known also as the 'Two Sisters,' to this Department for conservation, thus negativing a proposal for its conversion into a Circuit House. The back wall of the Gagan Mahal, the celebrated Hall of Audience of the Adilshahi Sultans, was strengthened, and it is hoped that the structure will now stand as it is for years to come. The compounds of the tomb of Ali Adil Shah I, and the Mihtari Mahal, were cleared of their accumulated débris, and tidied. Special repairs are in progress on the Palace and the tomb of Jahan Begam at Ainapur. This Palace, which is the only one at Bijapur not hopelessly transformed or ruined, is being thoroughly conserved, and the work will be finished next year. A grant-in-aid of Rs. 2,000 received for special repairs to the Jami Masjid at Tatta was spent in renewing *kalar*-eaten bricks of the walls. The Jami Masjid at Tatta is one of the most beautiful mosques in India, and is almost entirely covered with the encaustic tiles for which Sindh was once so famous. The tiles near the ground have almost disappeared through the destructive action of *kalar*, but they are being gradually replaced now by overburnt bricks, in order to minimize further damage to the structure. The work of conserving the tombs in the ancient necropolis on the Makli Hills near Tatta is also in progress. During the year under review the tomb of Nawab Isa Khan Tarkhan, a former ruler of Sindh, was thoroughly repaired. A large number of monuments recently declared protected will be taken in hand next year. At Bassein

dense vegetation had covered the Portuguese remains in the Fort, and by the beginning of 1919 it had become impossible to approach the interior of the churches and monasteries. As a first step, about nine hundred rupees have been spent in clearing sufficient of the jungle to permit of the buildings being properly inspected. The remaining trees and shrubs will be removed during the ensuing financial year. The work of repairing the monuments is in progress. At Dholka, in the Ahmedabad District, special repairs to the tombs at Vatwa and of Bahlolkhan Qazi's Masjid, are in progress, a portion of the back wall of the latter having been dismantled and rebuilt."

Eastern Circle.

In the Eastern Circle—owing to further reduction in expenditure consequent on the war progress was particularly slow and desultory. At Murshidabad, in Bengal, the conservation of some of the historical monuments has now been taken in hand. The revised estimate, which amounts to Rs. 2,054, is based upon recommendations made by Mr. Blakiston in 1913, and provides for jungle-clearance and the insertion of grilled doors at the Khoshbagh and Roshnibagh Mausoleums, and for various petty repairs to the monuments in the Dutch cemetery at Kalikapur (*cf.* Plate III(*a*)) and the Residency cemetery as well as the Soldiers' cemetery at Berhampur. The mosque of Sadi at Agarsindur, in the Mymensingh District, of which an illustration is given in Plate III(*b*), has also been conserved this year, and the damage caused by the earthquake of July 1918 has been made good. In style this masjid is typical of Bengal mosques, having three arched openings on the east, one central dome, octagonal turrets at the exterior corners, and elaborate ornamentation in terracotta. Three of these turrets had been more or less damaged and had to be strengthened; the southern half of the east façade had bulged, and serious cracks had developed in the region of the dome. These various defects have now been remedied, but the work was taken in hand in anticipation of archæological sanction, and the grievous mistake of whitewashing the whole building was committed by the contractor. Fortunately, the mistake is not an irremediable one, and it is to be hoped that it will be entirely rectified before the completion certificates are signed.

Bengal.

Assam.

In Assam, a small sum was expended on the Ahom palace at Gargaon (or Garhgaon) near Nazira, in the Sibsagar District. This three-storeyed structure, known as the Karanghar, is the sole relic of the times of the Ahom rulers. It has no pretentions to architectural beauty, and had suffered from the earthquake of 1897 as well as from the encroaching jungle. The present estimate was prepared at the instance of the Commissioner of the Assam Division, and provided for filling in cracks in the roof and arch openings and renewing missing brick-work where necessary.

Bihar and Orissa.

In Bihar and Orissa, two fairly substantial estimates for repairs to the famous Black Pagoda at Konarak were brought to completion. The first of these was the estimate mentioned in the Report of this office last year, embodying the proposals made by Mr. Blakiston in September 1914, and the second provided for the measures recommended by Mr. Clayton, the Chief Engineer, which were also described briefly in last year's Report. The bracket stones

of the gigantic *amla* crowning the jagamohan have now been supported by a series of dwarf pillars in dry masonry, and gaping joints between the stones have been filled in with small stones and cement-pointed. One of the stones, which had fallen out, has been replaced and all the joints in the several flights of cornices above the jagamohan have been pointed from above so as not to be visible from below. Where facing stones were missing and the exposed hearting was consequently endangered, new facing has been built up, particularly on the south side of the porch, and various cracks have been pointed up. The total expenditure has been close on eight thousand rupees. Apart from these measures at Konarak, the only other cases of special repairs in the Bihar Province which call for mention were those of the tomb of Syed Ibrahim on the great rock which towers above the town of Bihar itself, and of the monuments at Nalanda, excavated by Dr. Spooner. Though but a plain, undecorated, brick structure, the tomb or Dargah at Bihar is counted one of the principal Muhammadan monuments of the Province, and is of considerable antiquity. A portion of the outer wall which had been bulging has now been attended to, as well as some of the plaster on the dome, which had become loose, and the west side of the compound wall has been repaired. At Nalanda the monument that received most attention was the Monastery No. I, the conservation of which was carried as far as the existing clearance permitted. The largest item involved was the reconstruction of long stretches of the Verandah wall on the north, east and south sides, which had fallen down during the heavy monsoon of 1918. This work was accomplished satisfactorily. In the uppermost or latest building on this site, a number of cells on the north, west and south sides were repaired, and at Temple No. 2 further clearance was made at the S.-E. corner of the plinth, and the earth at the top of the sculptured friezes was dug away. At site No. III some of the small votive stupas were repaired and some minor repairs were carried out at the N.-W. corner of the main building.

Central Provinces.

In the Central Provinces and Berar seven special works were undertaken, all of which are still in progress. Among these was the conservation of the old palace of the Farukhi Kings at Burhanpur. Of the original structure very little except a three-storeyed ruin facing the river, and the Hammam, now survives. The latter having been converted into a dak-bungalow is in excellent preservation, but the former, which rises to a great height above the river and presents a singularly picturesque appearance, had suffered much from erosion (*cf.* Plate IV). The estimate, which amounts to Rs. 2,083, embodies the recommendations made by Mr. Blakiston in 1912, and aims at strengthening the masonry at the base of the edifice, supporting cracked lintels, filling cracks in the roof, securing old plaster and other minor items. A certain amount of underpinning is also to be done to the face of the wall outside the palace gateway leading to the river, but generally speaking, and apart from the Hammam, the monuments here are too far decayed for any extensive measures to be justified. At Nadir Shah's tomb, also in Burhanpur, the conservation described in my last year's Report is still in hand, and a

few petty repairs have been effected to Shah Shuja's tomb and the Jami Masjid in Burhanpur. Rs. 824 have been spent on the reclamation of the mosque in the Fort of Asirgarh, and Rs. 666 on rebuilding part of the retaining wall of the old Dharmasala, called the Madh Monument, at Mehkar in Buldana District, where it had been damaged by the rush of flood-water. None of these works, however, call for detailed description.

Madras.

In the Southern Circle, the Superintendent, Mr. Longhurst, reports a total expenditure on conservation of Rs. 19,887-0-1. Of the estimates funded the largest during the year is one for Rs. 2,550 for rebuilding the collapsed battery and raising the fallen rampart walls in the Fort at Bekal in the South Kanara District, where one of two estimates has now been completed. The next largest undertaking was also in connexion with a fort,—that at Gingee in the South Arcot District, where the mandapam over the Hanuman idol was reconstructed and certain lands were acquired around the Venkatramana temple and the 12 pillared mandapa in the Pattabirama temple, as well as for some pathways, the total expenditure amounting to Rs. 2,169. Hampi, also, was a centre of some activity, twenty separate estimates having been dealt with, though none are for large sums. Rs. 1,082 were applied in laying concrete over the basement of the palace buildings and plastering the top to prevent the growth of vegetation; Rs. 589 were spent on jungle-clearance about the monuments as a whole, and various structures received minor attention in the form of plastering, grouting of cracks, etc. It is also reported that good progress is being maintained with the improvements to the roads at this and other sites, notably at Gingee and the Seven Pagodas. Mr. Longhurst's example in placing albums of photographs in the rest-houses at the last named centre and at Hampi might be followed with advantage elsewhere. The special repairs to the ancient buildings in the Hill Fort at Udayagiri in Nellore District are still in progress, as are repairs to the temple in the Fort at Vellore in the North Arcot District, where rotten beams in the front gopuram are being renewed and the plastering on the top restored. With these exceptions practically all the items on the Madras list are completed, including Mr. Longhurst's special repairs to the Buddhist monuments at Guntupalle, the Narasimha temple at Vinukonda, the Jaina temple at Danavalapad, the Gooty, Wandiwash and Penukonda Forts and other places. At Guntupalle the work was left unfinished in the previous year, but the various items covered by the estimate, namely clearance of jungle from the stupas and their approaches, completing the masonry steps to the cells of the large monastery, and building other steps in the main pathway, together with minor works, have all been completed. At Vinukonda the floor of the Narasimha temple was repaired by putting down a layer of concrete, jungle around the temple was removed, and a space of six feet around the temple was gravelled. Boundaries were demarcated, leaks in the roof were closed, and notice boards were affixed in the usual way. At Danavalapad a concrete roof has been provided for the shrine chamber and the existing brick walls have been repaired, the brick mouldings and the cornice work have been

completed and a wall has been built behind the statue in the Jaina temple. Progress has also been made in the work of conserving the two palaces at Chandragiri, in the Chittoor District (Plate V), where the domes of the king's palace are to be replastered and the broken parapets restored, while a dwarf wall with intermediate pillars is to be constructed on the Queen's palace, the balconies repaired, and the cut-stone work of the parapet wall and the balcony to be restored.

Burma. In 1917-18 the sum allotted for conservation in the Province of Burma had dwindled down to only Rs. 11,302. In the year under review it has risen again to Rs. 50,269 and a comprehensive programme of works has been entered upon which is of good augury for the future. The immediate cause of this gratifying increase is to be sought in the cordial acceptance by H. H. Sir Reginald Craddock of the recommendations which I made after my visit to Burma in the winter of 1917-18. These recommendations had to do primarily with the royal palace at Mandalay which stood in more urgent need of attention than any other monument of the Province, and it thus happens that out of the half lakh devoted to conservation in Burma this year, more than Rs. 34,000 were expended upon this monument alone, Rs. 9,600 of this amount having been contributed by the Imperial Government. Erected originally in 1845 by Shwebomin at Amarapura, and removed to its present position by King Mindon in 1857, the Palace of Mandalay is now nearly seventy-five years old, and, being of wood like so many of the wonderful Burmese monuments, is much more liable to decay than contemporary buildings in India proper, where more durable materials are commonly used. The temporary neglect of the palace, due to economic reasons in the early years of the Great War, as mentioned in my Annual Report for 1916-17 (page 1), was ill-advised, and extensive measures are now requisite to overhaul the building thoroughly and render it really sound. The decision of the Local Government to face the situation and to embark on a systematic campaign of conservation is most gratifying, and the substantial progress made in 1918-19 is cause for congratulation. The work done so far has consisted mainly of cutting away the rotten and unsound portions of the wooden pillars and flooring and substituting sound wood-work in their place. A permanent staff of artificers has been engaged, and some of these have been employed also in repairing the glass mosaic work of various apartments in the Palace and in refixing certain of the damaged wood-carvings. The South *Pyatthat* of the Palace, which had threatened to collapse, was dismantled and rebuilt (the old material being used so far as practicable), and the *Pyatthats* numbered 12, 22, 33 and 41 on the Fort walls were similarly dismantled and rebuilt for the same reason. The re-building of Nos. 12 and 33 is in progress. A reference to Plate VI(*a*) will show how these picturesque structures appear after the achievement of these measures. But the renovation of so large and important a monument cannot of course be accomplished all at once; and accordingly the various outstanding projects have been divided into three groups. The first of these

groups includes items of an urgent nature classed as "immediate"; the second includes the less urgent, whose undertaking must await more favourable conditions, while the third covers charges of a recurring nature connected with the upkeep of the palace from year to year. It may be recorded that the estimates for the items in the first group total Rs. 71,315, and those of the second much the same, or Rs. 71,074. But while there is no possibility of taking up the items in the second group in the immediate future, still a first step in the right direction has been taken by the Local Government's appointment of a "Mandalay Palace Garden Committee" as a preliminary measure to the execution of the work involved in the improvements to the Palace gardens which were outlined in my note of the 12th January 1918. As a further earnest of the Local Government's determination to pursue the campaign vigorously, this measure is much to be welcomed, and the thanks of the Archæological Department are due to the ladies and gentlemen who have consented to serve on the Committee.

At Pagan, there are still a number of first class monuments (among them, the famous Damayazaka, Damayangyi, Shwesandaw, and Tilominlo pagodas) that are awaiting repair, but in view of the pressing need of money elsewhere, it has not been found possible during the past year to fund any of the special estimates relating to Pagan, notwithstanding that they now total a sum of not less than a lakh of rupees. Meanwhile, however, everything possible has been done to maintain in a worthy condition all the monuments that have been repaired, and the care with which they have been tended reflects the greatest credit on the Public Works' Officers in charge of them. Steps also are to be taken in the near future to make all the more important pagodas at Pagan accessible to the public both by linking up the buildings with roads and by constructing a metalled highway from Nyaung-u to the Circuit House at Pagan. To this end, a large scale map has been prepared showing all the notable monuments on the site, as well as the existing and proposed roads.

From Arakan also encouraging reports have been received of admirable enterprise on the part of the people themselves in the matter of repairing their ancient monuments at private expense. In this connexion Maung San Shwe Bu, the Honorary Archæological Officer for Arakan, writes that not only has the Mahamuni Temple been thoroughly repaired, but that extensive funds and materials are now being collected for its further improvement. The restoration of the Zina-manaung Pagoda at Myohaung is now complete, but the Elders are still collecting funds for the umbrella (*hti*) to be placed over it. When this is finished they propose to take in hand the conservation of the Ratanaman-aung Pagoda, for which a separate collection has already been made. He adds that in April last the late U Tha Aung Gri of Myohaung completed his repairs of the Thet-kya-man-aung Pagoda at a cost of about Rs. 25,000. The Archæological Department is of course neither concerned with nor responsible for these repairs which are carried out by the people at their own expense, but it is nevertheless gratifying to record so admirable a spirit on the part of the Burmese public.

Indian States.

Before closing this account of conservation it remains to notice also the progress made in this field by the Indian States. A few of the premier Indian States—notably, Hyderabad, Mysore, Kashmir and Gwalior—now maintain Archæological Departments of their own and the record of what some of them are achieving is eloquent proof of the liberal and whole-hearted manner in which they have responded to the lead given by the Supreme Government.

Hyderabad.

In Hyderabad State the most important project of the year was that connected with the preservation of the Ajanta caves and their incomparable paintings. Of these caves Mr. Ghulam Yazdani, the able and energetic Director of Archæology in H. E. H. the Nizam's Dominions, writes:—"The extensive campaign of conservation inaugurated some two years ago was vigorously continued during the year under report, at a cost of Rs. 30,420. It is gratifying to note that every cave of this unique series is now in good order, and the difficult problem of the cleaning and the preservation of the paintings has also received careful attention. H. E. H. the Nizam's Government have authorised Sir John Marshall, Director-General of Archæology, to arrange for the bringing out of an expert from Italy to preserve the paintirgs and to save them, as far as possible from further decay. They are equally anxious to keep a faithful and complete record of these matchless remains for posterity, and, to achieve this object, a comprehensive scheme has been worked out in consultation with Sir John Marshall, Sir Aurel Stein, and Monsieur Foucher, to have the frescoes reproduced by the three-colour process." In the historical city of Bidar a start has been made with the programme of conservation drawn up by Mr. Yazdani in 1916, and he now reports that the superb Bahmani monument known as the Madrasa Mahmud Gawan received particular attention this year, a sum of Rs. 8,210 having been devoted to it. In the conservation of this building the principal items have been the clearance of the accumulated heaps of débris, the marking of the outline of the missing wing of the monument, the underpinning of dangerous masonry, the levelling and draining of the inner courtyard, and the excavation and laying out of the outside portion of the site in large turfed courts intersected by neat *muram* paths. Among other monuments at Bidar repaired during the year, are the Takht Mahal and the Rangin Mahal and the tombs of Qasim Barid, of Sultan Muhammad Shah, of Sultan Ala'uddin Bahmani, of Sultan Mahmud Shah, of Sultan Humayun Shah and of Ali Barid. At Gulbarga the handsome building known as the Chor Gumbad was thoroughly repaired and cleaned during the year, a sum of Rs. 2,970 having been spent on the work. It should be added that the total expenditure on conservation in His Exalted Highness's Dominions during the year under review amounted to Rs. 64,721.

Gwalior.

In Gwalior the repairs to the Gumbaz ka Maqbara mentioned in last year's Report were completed, and the work of further clearing and conserving the rock-hewn caves at Udayagiri was taken up, but no other conservation measures were attempted, although a few further estimates were drawn up and are under consideration by the Darbar.

In Kashmir the work of conservation and clearance at the Avantisvami and Sugandhesa temples of Avantipur and at Pattan has now been completed in accordance with the recommendations which I made some years ago. At the Bandi temple the work which was commenced the year before has been continued, but except for the retaining wall at the back could not be finished, owing chiefly to want of labour. The floor of the sanctum of the Sankaracharya temple on the Takht-i-Suleiman above Srinagar has been relaid, and an outlet for water has been made in the northern wall. At the Mughal Gardens the only conservation work carried out during 1918-19 consisted of patch repairs to the compound wall of the Nishat Bagh, but it is gratifying to record that the Darbar has approved of the proposals made by the Superintendent, Mr. Hirananda Sastri, for improving the Chasma Shahi, Nishat, Shalamar and Verinag gardens, and estimates aggregating over twenty thousand rupees have already received administrative sanction. **Kashmir.**

In other States, which do not maintain archæological staffs of their own, there is little of moment to be chronicled except in Bhopal, where I had the privilege of continuing on behalf of Her Highness the Begam Sahiba the conservation of the famous group of Buddhist monuments at Sanchi. The tasks accomplished by me this year comprised the clearance and levelling of the ground to the north-west of the Great Stupa; the restoration of the south-west quadrant of the Great Stupa, involving a further 2,500 cubic feet of new masonry; the reconstruction of the carved stone balustrades on the stairway and berm (of which about half was completed—*cf.* Plates VI (*b*) and VII) of the same stupa; the repaving of the platform on the top of this monument and the reconstruction of the massive *harmika* balustrade and triple umbrella on its summit. The last mentioned work was one of some difficulty, as the sections of the stone shaft carrying the three umbrellas were not strong enough to bear their weight unsupported, and it was therefore necessary to bore each one of them down the centre (the longest was 13 feet in length) and thread them on an iron mast. Besides these works of reconstruction some further improvements were carried out to the two roads by which the hill is ascended, quarters were built for the two choukidars, 226 pedestals and other fittings of fine dressed masonry were provided in the new museum and the statues and other objects were duly set up on them. Moreover, a complete catalogue of all the exhibits in this museum was prepared and is shortly to be issued to the public. **Sanchi.**

Owing to the continuance of the Great War and the financial stringency produced thereby orders were issued at the beginning of the year under review for all further excavation work to be suspended, and since then no new ground has been broken at Taxila, Sarnath, Nalanda or other centres of excavation. Nevertheless, although there is much less of interest to chronicle this year in the line of new discoveries, still the year is not entirely barren of results even in this field. At Sarnath, for example, in the course of the conservation works which necessarily had to continue, the digging of a drainage trench led to the discovery of quite an interesting group of new structures **Exploration.** **Sarnath.**

in the area between the Main Shrine and the Dhamekh stupa. The first structure thus brought to light was a solid masonry wall running north and south and furnished with a flight of steps both inside and out, just opposite to the entrance to the Main Shrine. As this interfered with the drainage canal as originally outlined, the Superintendent, Rai Bahadur Daya Ram Sahni, found it necessary, before proceeding with the drainage scheme, to determine the bearing and extent of this wall, which now proves to be the eastern boundary wall of an extensive court attached to the Main Shrine on the east. This court, although subsequently used for the erection of various relic-stupas and votive memorials, Mr. Sahni thinks was originally designed as a gathering place for the numerous votaries of the shrine, and as both it and the large contemporary Monastery No. 1 were entered from the east, he infers that, in the mediæval period at any rate, the road from Benares reached the Deer Park somewhere to the east of the Dhamekh Stupa. The structures met with in the course of this work comprise some two dozen stupas (most of which contain relics), a long *chankrama* or promenade (measuring 162 feet in length by eight in width), and one small temple. Of these, the new stupas include a row of six built in stone, and similar in style too, though larger than, those exhibited in the south room of the Museum at Sarnath. As it was possible to conserve two of these completely and the rest at least partially, they have added quite an attractive feature to the site (*vide* Plate VIII *a*). "The temple," Mr. Sahni writes (Plate VIII *b*), "is built in the usual North Indian style like those at Sravasti with which it is nearly co-eval, and consists of a cella relieved by projecting off-sets on the outside. Originally, it appears to have been crowned by a spire, the *amalaka* of which was found in the débris around the temple, along with fragments of *chhajja* slabs similar to those of Monastery I. The porch had a flat roof, supported on plain square columns of stone. Against the back wall of the shrine my excavations revealed the original pedestal of the cult image, in good preservation; and, as the front of this pedestal shows several figures of Vajra-Varahi or Marichi, it may be assumed that the temple was dedicated to that goddess. Two or three images of Marichi have been found previously at the Sarnath site, and one or other of these may prove to be the actual image worshipped in this shrine. These excavations have also yielded a few interesting sculptures, including some valuable Saiva images. Chief among the Buddhist sculptures is a seated image carved in bold relief on a slab of Chunar sandstone, 4′ 9″ by 2′ 4″, which came to light three feet six inches below the surface on the flight of steps in the east boundary wall of the court described above. The deity represented is the Dhyani-Bodhisattva, Vajrasattva (*cf*. Plate IX(*a*)), and the sculpture is valuable as the first independent image of this deity yet found at Sarnath, though such images are said to be abundant in Magadha. The Bodhisattva has two arms. He is seated with his legs locked, and wears an elaborate crown and other ornaments. The right hand, which is now damaged, holds a *vajra* (Tibetan *dorje*) vertically at the breast, while the left hand holds a bell (*ghanta*) with its handle pointing downwards. The body of the bell

is broken. The deity is seated on a lotus-throne, evidently because, according to the Nepalese Buddhist writings, he was seated at the time of his manifestation on such a flower. In the crown of the Bodhisattva are two seated Dhyani-Buddhas. The upper one seems to be Akshobhya in the *bhumi-sparsa-mudra,* who is the Dhyani-Buddha of Vajrasattva. The sculpture presumably dates from the late Gupta period, but it bears no writing of any kind. Another object that calls for special notice is an incomplete *torana* frame, in stone, which must have adorned a niche in the temple of Vajra-Varahi described above, as it is carved with a number of representations of that goddess; but a photograph of the whole was not practicable, as the left upright has not yet been found. Among the Saiva sculptures must be mentioned, first, an almost unique variety of a two-armed Siva (ht. 2′ 6″), of the Tryambaka type. The deity is seated in the sportive attitude, with his right foot hanging down. In his right hand he holds a bowl, the usual emblem of Bhairava, and in his left hand the trident. On the god's forehead is the usual crescent moon, but a noteworthy peculiarity of this image and one that I have not yet noticed in any other representation of the deity known to me, is the delineation of the head of the demon Rahu in the act of devouring the moon. The identity of the demon is placed beyond doubt by his sunken eyes, and haggard look. His hands are shown on either side of the head. This image was found in the cella of the Vajra-Varahi temple mentioned above, and must have been installed in it for purposes of worship by Saiva votaries, after the temple had been appropriated for Brahmanical purposes. When this took place, it is difficult to ascertain. To judge from its style, the image must be assigned to the late Gupta or early mediæval period. Another Saiva idol that came to light in the same temple is a pedestal $9\frac{3}{4}''$ by $6\frac{1}{2}''$ high with five groups of Siva lingas, and passing mention may also be made of two other standing images of Siva, with four arms, which were found in the clearance of débris from the inner court of the main block of Monastery I. These images are several centuries later than the image of Tryambaka noticed above. The discovery of these Saiva images, in addition to the several others revealed by the previous explorations, shows how completely the site of Sarnath must have been Brahmanized in the later periods."

Another small but interesting discovery made by Rai Bahadur Daya Ram Sahni was near the Satghara temples at Katas in the Salt Range, which was identified in 1889 by Sir Aurel Stein as the site of the stupa built by Asoka at Singhapura. The identification of Katas with the Singhapura of the Chinese Pilgrim Hiuen Tsang appears to admit of no doubt, but "the stupa referred to," says Rai Bahadur Daya Ram Sahni, "was probably built in a much later architectural style, though the question could not be definitely decided without examination. Tentative excavations were accordingly carried out on the spot at a cost of Rs. 271, and they revealed the existence, inside the outer edifice, of an earlier structure, also a stupa, whose age was definitely determined by pilasters and capitals in the Gandhara style. A shaft was sunk into the centre of the structure down to virgin soil, but **Katas.**

did not yield any relics of value. Though it is now obvious that this stupa cannot be identical with the Asoka stupa, it still remains one of the most ancient visible monuments of the Punjab, and well deserves preservation."

Bihar and Orissa. The only excavation, as such, undertaken in the Eastern Circle was at Belwa in the Saran District of Tirhoot, where trial diggings were very generously financed by the Maharaja Bahadur of Hathwa. The work was carried out by the late Mr. H. Panday, whose explorations were confined to two mounds. One of these, known locally as the Bhairo-ka-sthan, is the site whence a fine but sadly disfigured image of Vishnu was obtained for the Patna Museum a year or two ago. The other, called the Bhar mound, Mr. Panday himself discovered. It is reported that "The remains unearthed in the Bhairo-ka-sthan mound are the ruins of a large temple with smaller shrines attached to it, and enclosed in a compound wall. On the evidence of sculptures and other datable antiquities found in these structures, they are assignable to the late mediæval period, but underneath these remains, the excavations brought to light a much earlier temple which cannot be later than about the 6th century A.D. This temple consists of two shrines built side by side, with walls 5′ to 6′ in width and bricks measuring 13″ × 8½″ × 2″. One of these shrines was dedicated to Vishnu, while the other may have belonged to the followers of the rival sect of the Saivas. The minor antiquities brought to light included three bronze images, which have been sent to the Archæological Chemist for cleaning, and a stone image of Vishnu. One of the former is a four-faced *linga*, set in a *yoni* of the lotus pattern on the top of a *damaru*-shaped pedestal. The second bronze is also a linga with a similar pedestal bearing a figure of Ganapati on the rim and adorned on the outside with a trident, a seated bull, and a human worshipper. The precise character of the third bronze image is not yet definitely ascertainable, but it may represent the Buddha at the moment of his enlightenment (bodhi)." The destruction of the temple is attributed by Mr. Panday to the non-Hindu hosts of Wang-hiuen-tse, the Chinese General who, he thinks, ravaged the country in 647 A.D., in retaliation for the treachery of Arjuna or Arunasva, the usurper of the throne vacated by the death of Harsha. The later temple which rose on the remains of the structure just described does not, in its present state, possess any special interest except for the large image of Vishnu, now in the Patna Museum, which must originally have been worshipped in it. To judge from a miniature carved on the door-jambs, the temple itself appears to have been one of the usual sikhara type, and was presumably destroyed in the 13th century, if not even later. The structures disclosed in the Bhar mound comprise seven blocks of secular buildings in which five successive occupations are discernible, the earliest period being the second or first century B.C. Here Mr. Panday found seven punch-marked coins, three copper pieces coated with silver, three copper coins of the Kushan dynasty, including one of Kanishka, and eleven terracotta seals or impressions, all of which except two illegible objects of the latter class were unfortunately lost by him in transit before they could be cleaned and studied.

Western Circle.

In the Western Circle, the following discoveries, noted by Mr. R. D. Banerji, are worthy of record:—

1. At Nagansur in the Akalkot State, Mr. A. H. A. Simcox, Collector of Sholapur, has discovered a group of Chalukyan temples. The most important of the number is a temple dedicated to Siva as Mallikarjuna, which contains some very good carving in the interior, although it looks drab and uninteresting from the outside.
2. At Un in the Nimar District of the Indore State a group of new temples has been discovered. Un lies to the South of the Narmada, close to the Bombay-Agra Road, at a distance of sixty miles from Sanawad Station. Some eight or nine temples are still standing in and around the modern village, but, besides these, ruins of a very large number of temples are to be found in the surrounding area. Like the temples at Khajuraho, which they closely resemble, the monuments of Un are both Hindu and Jain. In the Hindu temples worship is still carried on by the villagers, but the Jain shrines are deserted as they belong to the Digamvara Sect, of which faith there are very few followers left in this part of the country. Among the Hindu temples the best example is the temple of Nilakanthesvara. It stands in the middle of the village and has a very graceful *sikhara*. The *mandapa* collapsed long ago, but the carvings of the *sikhara* and the walls of the *garbhagriha* equal, if they do not excel, those of the Khajuraho temples. There are two temples bearing the name Mahakalesvara, which stand one at one extremity of the village and the other at the other. Of these, Mahakalesvara No. 2 is the more important on account of its graceful *sikhara* and its size. An underground temple called Guptesvara lies under the road leading from the Nilakanthesvara temple to Mahakalesvara No. 2. The temple of Vallalesvara is on the western side of the village and looks like a Muhammadan tomb from a distance. The *sikhara* had collapsed during the Muhammadan period, when it was rebuilt in the shape then in vogue. The name Vallalesvara suggests that it was built by Raja Vallala and tradition also associates Raja Vallala with the building of the temples of Un (Indore Gazetteer, p. 332). Close to this is the temple of Mahakalesvara No. 1. The Jain temples stand at the northern extremity of the village of which two are called Chaubara Dera. The *sikhara* of Chaubara Dera No. 2 was partly dismantled and carted away by a Muhammadan contractor employed by the State some time ago. This is the most interesting temple of the entire group, as it supplies us with a clue to fix the approximate date of these temples. It consists of a porch in front, a spacious *mandapa*, a small *antarala* and a roomy sanctum or *garbhagriha*. There are three small inscriptions in the *antarala* showing that this temple was used as a school for young children before the Muhammadan conquest. A short verse containing the name of King Udayaditya of Malava proves that the temples were built before his time. The second inscription consists merely of certain rules of

Sanskrit grammar, while the third is inscribed on the folds of the body of a snake arranged conventionally and consists of various letters, both vowels and consonants, of the Indian alphabet as well as the affixes used in the conjugation of Sanskrit verbs. A smaller inscription of this form (*Sarpavandha*) was found by Rao Bahadur K. K. Lele, formerly Director of Public Instruction of the Dhar State, in the Masjid close to the Dargah of Kamal Maula at Dhar, which is still known as the *Bhoja-Sala* or the School of Raja Bhoja. There are some illustrations of the *kamasutra* of Vatsyayana on the walls of the sanctum. In Chaubara Dera No. 1 there are no images, but the other two Jain temples, Chaubara Dera No. 2 and the temple of Goalesvara, still contain colossal Jain images of the Digamvara Sect which have been very little mutilated. Both of these shrines are beautiful specimens of Mediæval Indian Architecture, though in outline the temple of Goalesvara is more beautiful than Chaubara Dera No. 2. Both of them lie very close to the Khargon-Un road and in plan the second Chaubara Dera is almost identical with the first. There is a small porch in front of the *mandapa*, which is itself square in shape, with four doors, two of which lead to the outside. Like the *mandapas* of Chaubara Dera No. 1 and the Sas Bahu temple at Gwalior, it has a round dome supported on four tall and richly carved pillars. Inside the *garbhagriha* three mutilated Digambara images stand in a row on the pedestal. One of them is inscribed, and was apparently dedicated in V. S. 13 (?24). The floor of the sanctum in this temple and in the next is much lower than that of the *mandapa*. The temple of Goalesvara lies at some distance from the road, and stands on a hillock. In the sanctum three huge Digambara images stand in a row on the pedestal. As in the case of the Rishabhadeva temple at Khajuraho, the interior is furnished with stairways used by the priests, when they wanted to reach the top of the images. The back wall of this shrine has been partly demolished. Between the Khargon-Un road and Chaubara Dera No. 1 lie the ruins of several other temples. Trenches dug here by order of H. H. the Maharaja Holkar, about a year before my visit, yielded some colossal images, one of which is inscribed.

Madras.

In the Madras Presidency, no special work of exploration or research is reported apart from an interesting and important study of Pallava Architecture to which thirteen close-printed pages of Mr. Longhurst's Annual Report are devoted. This is the first instalment only of Mr. Longhurst's contemplated work on South Indian Architecture as a whole, the idea of such an undertaking having been suggested by the Director-General in 1916. The memorials of the Pallavas were selected as the first to be taken up for the reason that they constitute the earliest Hindu architecture in the South, and Mr. Longhurst hopes to complete his initial studies in this field during the following year. His present contribution is devoted to the history and the religion of the Pallavas,

and an analysis of the architectural character of their monuments, which are found to fall into four styles. These four styles follow one another in chronological sequence, the first or Mahendra Style being illustrated by monuments of the period 610 to 640 A.D., and the second or Mamalla Style by monuments between 640 and 674, etc. The peculiar features of these styles are described at length in Section 3 of the paper contributed this year, while Section 4 is devoted to a detailed enumeration and description of the buildings comprised in the first of the four groups. "All monuments in this style," Mr. Longhurst tells us, "are rock-cut excavations. They have but one external façade which is in the face of the rock. On plan, the temple consists of a rectangular pillared hall with a small square shrine chamber excavated in one of the side walls. With the exception of the Vishnu temple at Mahendravadi, all are dedicated to Siva." The cave-temples particularised by him in Section 4 include those of Dalavanur, Trichinopoly, Mandagapattu, Pallavaram, Mahendravadi, Vallam, Melacheri and Singavaram. These are all, with the exception of the caves at Vallam, admirably illustrated by photographs, both general and detailed, and by drawings.

From Burma Mr. Taw Sein Ko, the Superintendent, reports several discoveries made by district officials. Thus at Ankare, Kyaikmaraw Township, Amherst District, some glazed earthenware bowls and vases were found which for the first time reveal the fact that glazing was an indigenous Talaing industry pursued as late as the 18th century (Plate X*b*). Chinese records cited by Mr. Taw Sein Ko from Sir Richard Carnac Temple afford evidence for this art in the ninth or even the eighth century A.D. Mr. Taw Sein Ko speaks further of certain prehistoric remains discovered by the Deputy Commissioner of the Pakokku District, on a slight eminence near Kyauksauk village in the Myaing Township. Mr. Sitzler, who has quite a collection of these prehistorics, sent him twelve stone axe-heads, one shell, and some fossilized bones for examination. Two of the axe-heads have been examined by Mr. Hallowes of the Geological Survey, who had visited the find-spot, and who reports that "The larger of the two is made of dark green hornblende schist, a very hard tough rock which is a common component of rocks of the Dharwar age belonging to Ardrean times. The axe-head has been made from this rock by early men, possibly at the close of the Pliocene, or at the beginning of the Pleistocene, epoch. I visited the spot personally, and found these axe-heads to be associated with human remains. There is no evidence that the locality was ever the site of a lake.—" The axe-heads in question are illustrated in Plate X*a*. Another interesting find is a terracotta votive tablet from Sinde village in the Prome District. Mr. Taw Sein Ko says that "It is semi-elliptical in shape, and measures nearly $3'' \times 2\frac{1}{2}''$. It bears three seated figures, all seated on lotus-thrones. The middle figure, which is plainly dressed, represents Gautama Buddha seated cross-legged in the *dharma-chakra-mudra*. On its right is a similar figure, but smaller in size, and seated in the *bhumi-sparsa-mudra*. On its left is another seated figure, wearing a high head-dress, with a wreath or chain falling loosely over its breast. This, Burma.

too, is seated cross-legged, but its right knee is slightly raised, and its right foot appears to be resting on something which cannot be identified. Both hands are pendent and rest on the knees. This figure may be identified with Avalokitesvara, while its counterpart on the right of the central figure may be identified with Amitabha, a Dhyani-Buddha; and the tablet itself may be assigned to about the 10th or the 11th century A. D." Mr. Taw Sein Ko adds that this tablet certainly represents Mahayanism, and it is of great interest to record that traces of that form of Buddhism are found so far south as the meridian of Prome, and so close to the border of the Talaing country, the original home of the Hinayana or 'Southern' Buddhism in Burma.

Kashmir. The orders restricting excavation work in British India until the end of the war were naturally inoperative in the Indian States, and Pandit Hirananda Shastri reports that excavations were carried out at two sites in Kashmir territory during 1918-19. The first of these was at a place called Fatehgarh, some six miles to the west of Baramula, where part of the spire of an old shrine protruded from a large tumulus which was visited and photographed by Major Cole so long ago as 1868. The site is not one very favourable to exploration, as the houses of the villagers have encroached upon the ruin, and there is no very convenient spot in the neighbourhood for dumping spoil-earth. Nevertheless, in order to examine the nature of the monument and that of any loose antiquities in possible association with it, Pandit Hirananda started trial diggings on the west and north. In the former direction the floor level was found at a depth of 13′ 4″ from the top of the mound, though the middle of the sanctum is only 12′ from the surface. This excavation on the west exposed the main entrance to the temple, and great blocks of stone measuring from eight to twenty-seven feet in length. This entrance led to the cella which, when cleared, disclosed a large *linga* lying obliquely on one side, thus proving that the structure was a Saiva temple. So far this entrance, with its six steps, and a portion of the western and the northern façades have been cleared, but judging from what can now be seen, the plan of the shrine is slightly different from that of other Hindu temples in Kashmir; that is to say, the present shrine shows a single plinth and a single flight of steps, while other temples generally have double ones. The other site in Kashmir where spade work was attempted this season was at the Indar Spring, the reputed site of an ancient Naga, which tradition says was covered over with chinar planks and buried in the time of Afghan rule. The inhabitants of the locality having applied to have this ancient spring opened out again, Pandit Hirananda was instructed to examine the place and report to the Darbar. His excavations were carried to a depth of ten feet before they were obstructed by the inflowing of water, which percolated from all sides, the spot being surrounded by streamlets. Shortage of labour also interfered with the work, and the final examination of the site had to be postponed to the following year. But Hirananda Shastri's work has already proved that the place was sacred to the Hindus in past ages, and was apparently desecrated, as several images, mostly fragmentary, were recovered, including one, almost entire, of Kausiki.

It is hoped that further digging will disclose the actual spring, and possibly ancient shrines surrounding it. Pandit Hirananda Shastri thinks that the site is referred to under the name of Chandra Naga in the Svayambhava Samhita, but Kalhana does not appear to mention it. A further site which he thinks is full of promise for the explorer is the Forest of the Six Saints, the ancient Shararhadvana, near Harwan. He has secured a few interesting bricks at this place, and tiles stamped with the likeness of an old ascetic, "possibly one of the six arhats after whom the place was designated in ancient times." Two of these interesting fragments are shown in Plate XI.

Hyderabad. In Hyderabad State Mr. Wakefield, O.B.E., Director of Commerce and Industries, opened a few cromlechs at Janampet, during his tour in the Paloncha Taluqa. The prehistoric graves of this locality had been previously examined by Messrs. King and Mulheran, and short accounts of them were published in the P. A. S. B. for April and June 1868, and again in the J. A. S. B. for 1877 (Pt. I, pp. 179-185). There are several groups of cromlechs scattered about in this region, and it is not certain whether those now examined by Mr. Wakefield are the same as the ones previously explored. The cromlechs which Mr. Wakefield has examined are said to resemble those in Africa and in Europe. Their arrangement consists of either a single or a double ring of stones, with one large heavy boulder, weighing several tons, mounted on three or four stones at the centre, thus forming a sort of table. Below this central boulder the coffin lies buried, monolithic, and not unlike a trough. The coffin was in some cases found exposed on the surface, but this may be due to erosion, as the ground level in this tract is not uniform. In the older investigations of Mr. King, the most remarkable feature recorded was the presence of cross-shaped tomb-stones. Mr. Wakefield has not been able to trace any of this form, but he has discovered two wedge-shaped pillars, four or five feet high, with a circular protuberance at the top. This protuberance Mr. Wakefield takes to represent a human head, the stones thus being crude likenesses of the human form; one, which shows a pair of rings placed side by side, appears to have breasts indicated in this way and to be consequently the likeness of a woman. In any case, the stones now described by Mr. Wakefield are quite unlike the cross-shaped tomb-stones previously met with and constitute an interesting addition to our materials for the study of these primitive remains.

Gwalior. The chief activity of the year in Gwalior was in the domain of listing the ancient monuments, and here Mr. Garde, the Superintendent, reports that 261 different monuments of all classes distributed over 36 villages in five districts have been inspected and described. Of these the oldest met with are the two small caves and certain wells cut in laterite at Tumain (called *Tumbavana* in the inscriptions), which together with certain inscriptional and other remains date from the Gupta period. The only old structure which has survived, even in part, is an originally Vaishnavite temple now dedicated to the Vindhyavasini Devi (Plate XII), which Mr. Garde assigns to the 9th century though this seems perhaps a little early for it. The original building

was decorated with vigorous and beautiful carvings representing incidents in the life of Krishna, but this older portion has been repaired and added to in later times. Another interesting and valuable monument, not improved by modern tampering, is shown in Fig. *a* of Plate XIII, which illustrates a figure of Balarama assignable to the 2nd or 3rd century A.D. This also is located at Tumain. Other monuments met with in the course of this year's survey are the monolith at Tilori shown in Fig. *b* of Plate XIII, which bears an important inscription of the Kachhawata and Chahamiana dynasties, and the remarkable *sati* pillar at Kolaras shown in Fig. *c* of the same Plate. This stands some 16 feet above the ground and bears an inscription dated in Samvat 1348. The curious figure of Kartikeya illustrated on Plate XIII, Fig. *d*, occurs at Ranod.

Bikaner.

In my last year's Report reference was made to the work of exploration in Rajputana, which the late Dr. L. P. Tessitori had engaged to carry out on behalf of the Archæological Department simultaneously with his Bardic Survey, and the following brief report—the last official communication received from him—will show of what value and interest his investigations promised to be. The death of this brilliant young scholar, which took place at Bikaner in November last, almost immediately after his return from Italy, is one which will be deeply regretted by all who remember the charm of his personality, the single-heartedness of his life, and his intense devotion to his work in Rajputana. His loss indeed is irreparable; for there is no one living who possesses the special knowledge which Dr. Tessitori brought to bear on his Survey of the bardic chronicles; and even as regards the achæological work which he was doing, it will be no easy matter to replace him.

" This year," writes Dr. Tessitori, " I continued the exploration of the Bikaner territory according to plan and was out in camp—including short pauses at head-quarters—for about three months altogether, *i.e.*, from December 4, 1918, to March 3, 1919. The places explored were all in the northern part of the State, mostly along the dry bed of the Ghazzhar, and the principal object of the exploration there, was to collect materials for the archæological museum which it has been decided to start at Bikaner. As already remarked in my previous report, the region of the Ghazzhar is characterised by a great number of *theris* or ancient mounds, and as one or two localities (Rang Mahal, Sahivan) had been ascertained to be Buddhist, it was hoped that exploration supported by small excavations might yield some objects of interest. This hope was not frustrated. At least three new stupa sites were traced, Bhadrakali, Pir Sultan, and Munda, and these yielded a number of terracotta fragments, decorated bricks, figurines, pieces of pottery, coins, etc., which I think amply repay the labour and cost involved in the exploration. Unfortunately, trial pits sunk into the ruins proved that the stupas themselves were in every case almost entirely destroyed. The largest of the three must have been the stupa of Munda, which was built on the top of a sand-hill over a square platform measuring about $120' \times 120'$ and access to which was apparently provided by means of two lateral wings, at least 110′ long. Among the fragments found on the site was a broken railing pillar in the form of a brick slab $9\frac{1}{2}''$ broad by $2\frac{3}{4}''$ thick, decorated

in the centre with a lotus-flower (Plate XIV, fig. *b*) and several fragments of a *harmika* railing.

"Another interesting site was traced at Dotheri, where the ruins of a small fortified city were discovered, a city originally encompassed by a rectangular wall enclosure measuring some 600 and 870 feet. The wall is now gone, but remnants of its foundations were found below the ground level, and these were in the form of a walling, at least 14′ 4″ broad, made of sections of regularly built masonry alternated with fillings of brick rubble and mud. The size of the bricks used in the wall varied from $15\frac{1}{4}'' \times 9'' \times 2\frac{1}{2}''$ and $14\frac{1}{2}'' \times 9\frac{1}{4}'' \times 2\frac{1}{2}''$ to $9'' \times 9'' \times 2\frac{1}{2}''$, and the evident antiquity of the place was further confirmed by the comparatively large number of coins and other small objects found over or near the surface. The most interesting find of all, perhaps, was made at the Pir Sultan mound, where a trial excavation made in what was suspected to be the original site of a stupa, brought to light fragments of a large terracotta statue in alto-relievo, representing a female in a standing posture. The statue was made in two pieces joined together just below the hips of the figure and, as far as can be judged from the fragments, these two pieces must have measured about $25'' \times 14'' \times 10''$ each. A notable feature of the statue is the modelling which is very good, especially in the drapery, and probably affords sufficient ground for inferring that the production belongs to the best period of the Gandhara School (Plate XIV, fig. *a*).

"A site of particular interest was discovered at Kali Banga, but unfortunately the leave out of India which I am obliged to take from the middle of April, has prevented me from studying the materials collected on the spot. I hope to be able to give an account of them in my next report."

As regards inscriptions, nothing of special historical or palæographical interest was found during the year. The number of the inscriptions copied exceeded five hundred, but the great majority of these are devati epitaphs of no importance, and the remaining inscriptions have only local interest, as they refer to the internal history of Bikaner.

Sanskritic Epigraphy.

For the following account of the progress made in the field of Sanskrit Epigraphy throughout India generally, I am indebted to Mr. Krishna Shastri, who is in charge of the Government Epigraphist's duties. He reports that seven parts of the *Epigraphia Indica* have been issued, namely, Part VII of Volume XIII and Parts I to VI of Volume XIV. These numbers contain much interesting historical material and include some notable articles by scholars both in India and abroad, but it would serve no useful purpose to repeat the substance matter here, and I pass on to a consideration of the Epigraphical work done in the various Circles in the year under review.

The three new inscriptions discovered in Burma are described later on in the present Report in a note supplied by M. Duroiselle; but even apart from these, Mr. Taw Sein Ko's Report discusses many epigraphical questions of much interest, such as the epigraphic connection between Burma and Southern India, and the relation between the Shan and the Tibetan alphabets. He also discusses the reference

made in a Talaing inscription from Prome to a Chola Prince meeting Kyanzittha and to his being converted by him to Buddhism, and the Lopburi (Siam) Talaing inscription of the 6th-7th century A.D. Mr. Taw Sein Ko has also made a study of the names Srivijaya, Kadaram, Madamalingam, Mappappalam and Talaitakkolam, which occur in the Tamil inscriptions of the Chola king Rajendra-Chola I, and which have always been supposed to indicate places in Prome or Pegu, and comes to the conclusion that they are to be sought rather in the Malay States. Suvarnadvipa Mr. Taw Sein Ko proposes to identify with the District of Dacca in Bengal.

The Superintendent, Rajputana Museum, Ajmer, copied and examined 24 Hindi inscriptions besides a number of Persian inscriptions not yet deciphered. The Hindi records excepting one or two are not of very great interest. Prithvipaladeva whose record from the Alwar State is dated in A.D. 1152, is suggested to be a descendant of the Pratihara kings of Kanauj and to have ruled over part of Rajputana, just as Malayavarmadeva of the same family ruled at Narwar after the kingdom of Kanauj had passed into the hands of the Gahadavala king Chandradeva at the end of the 11th century A.D. A bilingual inscription in Hindi and Persian on the *bund* of the Somasagara Lake near Ajabgarh is a *farman* issued under the authority of Akbara Jalaladinaji (Akbar Jalaluddin) in A.D. 1597, prohibiting fishing and killing of other animals at the Somasagara Lake, the infringement of which, it is stated, would cause the displeasure of Hajarata (Hazrat, *i.e.*, the emperor). Another bilingual inscription of A.D. 1702 records the construction of a Masjid by Khema, son of Bharatha Bhopa (an animistic priest) of the village Samra, during the reign of the Emperor Aurangzeb.

In the Western Circle some very important inscriptions were copied and examined. The inscription of Ukha Mandir at Bayana (Bharatpur State), which was recently removed from the pavement of the temple, was examined by Mr. Banerji. The record has proved to be one of very great importance supplying to us the name of a new emperor, the Maharajadhiraja Mahipala II of the imperial Pratīhāras, coming between Devapāla of the Siyadoni inscription of A.D. 948 and Vijayapāla of the Rajor inscription of A.D. 960. The donor was the wife of a prince named Mangala, a descendant of Phakka, who in the Kaman inscription of Vatsadaman noted below (to be re-edited by Mr. Banerji in the *Epigraphia Indica*), is stated to have been the seventh ancestor of Vatsadaman in the Saurasena dynasty. Mr. Banerji infers that the Saurasena dynasty must have continued to rule over Mathura and the surrounding country till the time of the rise of Bhoja I of the Gurjjara-Pratihara dynasty in the first half of the 10th century A.D. A new inscription of the Vakataka king Prithvisena was discovered at Nachna Kuthara near Ganj in the State of Ajayagadh and will be published by Dr. V. S. Sukthankar in the *Epigraphia Indica*. Two copper-plate inscriptions of Dhruvasena I of Valabhi, presented to the Prince of Wales Museum by the Palitana Darbar, were also examined. The first of these, which is complete, was issued from Valabhi in the year 207, the fifth day of the dark half of Vaisakha. Two diagrammatic figures arranged

in the form of the coils of a serpent (*sarpavandha*) were discovered at Dhar and Un and have been found on examination to contain the letters of the alphabet and the Sanskrit conjugational terminations inserted in the interspaces of the serpentine coils, in script of the 11th century A.D. These curious records will also be edited by Dr. Sukthankar in the *Epigraphia Indica.* A Sanskrit inscription at Petlad near Cambay (Baroda) which is dated in 1280-81 A.D. refers to Sultan Ghiyathuddin Tughlaq of Yoginipura, *i.e.*, Delhi, and the repairs carried out to a well by a person named Usmana Siraja, a resident of Stambhatirtha, *i.e.*, Cambay.

From the Eastern Circle Rai Bahadur Daya Ram Sahni reports that no Epigraphical discoveries were made during the year under review excepting the Pamchobh copper-plate acquired under the Treasure Trove Act. About 300 impressions of the inscriptions of Bihar and Orissa preserved in the Indian Museum, Calcutta, were, however, prepared for permanent record in the Patna Museum.

Considerable interest attaches to the epigraphical work of the Northern Circle during the year under review. About 90 new inscriptions were copied, of which seventy-seven have been deciphered by Mr. Sahni. From Mathura has been acquired an inscription carved on the pedestal of a Bodhisattva image, which is dated in the Kushana year 20 in the reign of Kanishka. Mr. Sahni has noted that this is two years later than the latest hitherto known date for Kanishka and reduces the interval between him and his successor Vasishka by two years. Still another record copied at Mathura which is dated in the Kushana year 22 does not contain the name of the king. Among the other inscriptions secured are three Gupta inscriptions, a fragmentary *prasasti* of Bhojadeva—probably the Pratihara Emperor of Kanauj—a record of Raja Satrughnadeva, two Sarada epigraphs of the Sahi kings Bhimadeva and Jayapaladeva, an incomplete inscription of the reign of queen Didda of Kashmir, and two others dated in the reign of Hammiradeva, who should probably be identified with Mas'ud, the son and successor of Amir Mahmud of Ghazni. One of the 12 new inscriptions copied at Delhi in the Kutb Minar and the Iron Pillar, is a brief record of about the 17th century A.D. which designates the Minar as a Kirti-stambha, *i.e.*, 'a pillar of victory.' Inscriptions were also copied at Soron and Kampil.

In the Southern Circle 368 villages were visited and 700 lithic records copied and examined. 200 others (also new) which were copied, were not, however, included in the appendices to the Report, since these were taken up for immediate publication in the New Series of *South-Indian Inscriptions* under the orders of the Madras Government. Twelve copper-plate records were also examined. Three of these latter, which belong to the beginning of the 14th century A.D., give an elaborate list of the achievements of a guild of merchants of the Vira-Balanja community. Six sets of copper-plates secured during the year belong to the Eastern Ganga kings of Kalinga. Two of these refer to the early kings Devendravarman and his son Anantavarman. One is of king Madhukamarnava, son of Anantavarman and is dated in the year 526 of the victorious rule of the Gangas.

Vajrahasta III and his son Rajaraja *alias* Devendravarman, are represented by three copper-plate records. These supply the date of the coronation of Rajaraja as Saka 992, Jyaishtha, Ashtami, Simhalagna, Uttara-Phalguni, Thursday and the bright fortnight, and state that he ruled for 8 years and married Rajasundari, a daughter of the Chola king Rajendra-Chola II (*i.e.*, Kulottunga I).

One of the large number of Chola stone records copied during the year introduces a hitherto unknown queen of Parantaka I called Adittan-Karrali-pirattiyar. In another, Kundavai, the elder sister of Rajaraja I, is referred to as the daughter of Ponmaligaittunjinadeva, thus clearly settling the identification of Sundara-Chola Parantaka II with Ponmaligaittunjinadeva. A record of Rajakesarivarman Rajaraja I supplies by way of quotation, a date for Gandaraditya surnamed Mummadi-Chola. This is the only date hitherto found for Gandaraditya from inscriptions, though the fact of his succession to the throne is established by the Tiruvalangadu copper-plates. An inscription from the South Arcot district of the time of Rajadhiraja I (A.D. 1018-1050) provides among other temple expenses, for three teachers of the Rig-Veda, three of Yajur-Veda, one each of Chhandogasaman, Talavakarasaman, Atharva, Vajasaneya, Baudhayaniya-Sutra and Satyashadha-Sutra; one teacher each for expounding Vedanta, Vyakarana, Rupavatara, Sri-Bharata, Ramayana, Manu-Sastra and Vaikhanasa; for sixty students each of the Rig-Veda Apurva and Yajur-Veda Apurva; twenty students of Chhandogasama and fifty of Talavakarasama, Vajasaneya, Baudhayaniya-Sutra and Satyashadba-Sutra and for seventy students of Vedanta, Vyakarana and Rupavatara. One or two records of the 12th century A.D. of the time of Rajadhirajadeva II refer to the reduction of land rents both in kind and in coin, to the rights of women to hold property and to other social laws such as 'that Brahmanas shall not till lands with bulls yoked to the plough and that the labouring classes shall not become *Vel* and *Arasu* (*i.e.*, fighting men and landed aristocracy).' Literary work also progressed. It was submitted to the assembly of village Mahajanas by royal order for adjudgment of merit. A work called *Kulottungasolan-charitai* written by a certain Tirunarayana-Bhattan surnamed Kavikumuda-chandra-Pandita was so tested in the 27th year of Kulottunga I, *i.e.*, A.D. 1097.

M. Duroiselle, Assistant Superintendent for Epigraphy, reports that during the year 1918-19, three new epigraphs were discovered in Burma. One is inscribed on stone, and is probably in Burmese, but owing to the peculiar locality in which it is situated it cannot be examined. It is situated near the Nanda Lake, on the Lamaing road, to the north of the Mandalay Hill, about 2½ miles from Mandalay. A large banyan tree has grown above it with its roots around it, and the stone itself is buried in the ground, except for three or four inches of the top which protrude. Unfortunately the banyan tree is the habitat of a *genius loci* much feared by the inhabitants of the surrounding villages who tremble at the idea of the abode of the *nat* being in any way disturbed. This has lost the inscription to us, as we do not wish to

distress the people's feelings. Of the two remaining epigraphs one is inscribed on a bell found at Vesali, one of the ancient capitals of Arakan. It contains two lines of mixed Sanskrit like some of the Jaina inscriptions from Mathura. Estampages were prepared and submitted, for favour of examination, to Mr. H. Krishna Sastri, officiating Government Epigraphist, who is of opinion that the writing is in the Gupta character of about the VIIṭh century A.D., if not somewhat earlier. According to him, the inscription records the dedication of a religious gift to a *chaitya*, and Mr. Taw Sein Ko is inclined to refer it "to the reign of Harsha (606-648 A.D.), that great Monarch who was crowned as Lord Paramount of Northern India, who was a friend of the Chinese Pilgrim Hiuen Tsang, and who, while following an eclectic religion, like Asoka and Akbar, did so much for the spread of Buddhism. Kāmarūpa or Assam, which is almost a next-door neighbour to Arakan, is mentioned as one of the outlying States tributary to the Emperor Harsha. Arakan must have felt the influence of Harsha either through Assam or Bengal (Pundravardhana)." The other epigraph is in Siamese, and is inscribed on a stone, which has now been placed in the Museum, Pagan. Estampages and photographs of it were prepared and sent to M. George Coedès, Director of the Vajirañāṇa National Library at Bangkok, for favour of decipherment and translation. M. Coedès' reply is awaited.

Among the records examined by M. Duroiselle during the year under report, the most interesting is a Mon (Talaing) inscription, now placed in the Vajirañāṇa National Library at Bangkok. Of this inscription M. Duroiselle says, "It was discovered some years ago at Lopburi in Siam in a monument called San Sung, and was for some time placed in the Ayuthya Museum and then sent to the Vajirāñaṇa National Library at Bangkok. There it was, says M. Coedès, marked as being in an 'unknown language.' Fortunately, M. Coedès remarked in it some unmistakable Talaing words, upon which he was so kind as to make it over to me by sending me a good estampage with a tentative decipherment. It consists of four inscriptions, but owing to the very archaic nature of the words contained therein, they have not yet been satisfactorily explained. However, their general sense is clear enough; they all appear to contain an enumeration of gifts dedicated to the temple.

"The record so far as I have been able to ascertain, is not dated, but on palæographic grounds it may be safely assigned to the 6th-7th century A.D.

"The great interest of this inscription does not, therefore, lie in its contents, but in the fact that it is the oldest Talaing inscription that has yet been discovered in Burma and the country conterminous with it; for, up to the present, the oldest inscriptions in Talaing that had been found did not antedate the XIth century A.D. Incidentally, it confirms in a remarkable manner the tradition current among the Talaings and the Burmese, and which had so far been based on hypothesis, that the former possessed an alphabet and a vernacular religious literature from the early centuries of the Christian era.

"Besides the above, M. Coedès mentions that there are three other Talaing inscriptions at Lamphun (Haripuñjaya), in Siam. Just now, however, he has

only very imperfect tracings of them, so that he did not feel justified in sending them; but he hopes soon to send their estampages. From his remarks it is to be inferred that they are not so old as the Lopburi document, but probably somewhat older than the Pagan Talaing inscriptions of the 11th century. Their characters, it appears, have more affinity to those of the Pagan inscriptions than to those of Lopburi. If these three inscriptions ultimately prove to belong to a period between the 7th and the 11th centuries, they will be of great importance for the history of epigraphy in Burma. It is to be hoped that they contain some historical data, which may help to lift a little the veil that conceals the political history of the Talaings from the 7th to the 11th century."

Moslem Epigraphy.

The back numbers of the *Epigraphia Indo-Moslemica*, which were in arrears for some time, have all been published and the issue for 1917-18 is now in the press and will appear shortly. This number comprises four articles, all of which are from the pen of the Government Epigraphist, Mr. G. Yazdani.

In the first article Mr. Yazdani has noticed an inscription of the well-known historian Khāfī Khān and discussed the exact significance of this title of the author. There has been a difference of opinion among scholars on the subject and Mr. Yazdani, on etymological and traditional grounds, is led to agree with Morley that Khāfī is from *khīfā* 'to conceal' and that the title has an allusion to the fact that, in spite of Aurangzeb's prohibition against any account of his reign being published, there was an historian in 'concealment' who was carefully noting the events of his reign and who, after the monarch's demise, compiled a history of the period.[1] This article contains also a short life of Khāfī Khān which has not been published up to now.

The second article deals with two inscriptions in the historical fort of Naldrug, which was an important out-post of the Bījapur kings. Of these records one epigraph gives the architect's name and the date of the picturesque building known as *Pānī Maḥall* (Water Palace). The other inscription refers to the additions made in the fortifications of the Naldrug Fort by 'Alī 'Ādil Shāh II, which are also alluded to in Ferishta's history.[2]

The third article, dealing with the inscriptions of the Khālji kings, as announced in last year's Report, was to have been included in the *E. I. M.* for 1915-16; but considerable difficulty was experienced in obtaining estampages of certain inscriptions in out-of-the-way places, and the article could not be published in that issue. The Government Epigraphist in this paper has studied the various features of the style of writing in vogue at the period in Delhi and neighbouring places and compared it with the contemporary style in Bengal. The former, like the early Delhi architecture, is characterized by largeness and vigour in conception joined with elegance in execution. The distinguishing features of the Bengal calligraphic and architectural arts of the period, on the

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[1] *Descriptive Catalogue* of historical Mss. in the Library of the Royal Asiatic Society, p. 100.
[2] *Briggs*, Vol. III, p. 122.

other hand, are delicacy and crispness of design and prettiness of detail. This article deals with 34 inscriptions and is illustrated by fourteen plates.

The fourth article is a continuation of Mr. Yazdani's two previous papers on the inscriptions of the Quṭb Shāhī kings, and deals with the epigraphs of the dynasty in the city and suburbs of Hyderabad. The object of the series is to present to scholars a systematic and complete study of the Quṭb Shāhī inscriptions, discussing the origin, development and artistic merits of the various scripts used, the phraseology and literary styles of the texts, critical notes on the dates, and identification of the historical persons whose names are mentioned.

During the year under report the Hon'ble Mr. H. Sharp, C.S.I., C.I.E., discovered an interesting inscription of Sikandar Lodī which is now being edited along with the other epigraphs of this king, by Mr. Zafar Hasan, and will be published in the next number of the Journal.

The Government Epigraphist examined and translated a large number of *sanads* and inscriptions received from the Indian Museum, Calcutta, the Superintendent, Archæological Survey, Eastern Circle, the Assistant Archæological Superintendent for Epigraphy, Southern Circle, and the Officer-in-charge Archæological Researches, Mysore.

Archæological Chemist.

Mr. Mohammad Sana Ullah, who had been sent to England for training, returned to India on the 15th June 1917, and was appointed Archæological Chemist on the 29th, as was briefly mentioned in last year's Report. He was deputed to Calcutta, immediately, to overhaul the antiquities at the Archæological Section, Indian Museum, and to this end fitted up a temporary laboratory in one of the rooms in the Museum, for carrying out the various operations for the preservation of the antiquities. On account of the war, the outfit which he had purchased in England, was delayed and caused some inconvenience. The number of objects preserved in the year 1917-18 amounted to 330 including the Khotan Manuscript. That year he visited, firstly, Lahore, for the treatment of the Central Asian Antiquities in the Central Museum; then Sanchi, to overhaul the antiquities excavated there; and finally, Ajanta, to experiment with casein-lime cement, for fixing the detached frescoes back to the walls. Early in the year 1918, the chemicals and apparatus which were expected from England arrived, and since then the work has progressed with greater ease and vigour. Most of the antiquities at the Indian Museum needed treatment. In particular, the stucco and clay objects belonging to the Stein Collection, as well as several bronzes and lead coins were in danger of decaying. The preservation of the various objects was carried out, briefly on the following lines. Stone and terracotta were freed from injurious salts by steeping in plain water; but in the case of the Central Asian stuccoes saturated solution of Calcium Sulphate was employed for this purpose. After drying they were impregnated with an alcoholic solution of bleached shellac under vacuum. The same solution was employed for fixing loose pigments before steeping. Soft objects of unbaked clay were treated with a solution of casein in ammonia and impregnated with paraffin-wax after drying. Calcareous incrustations on stone and terracottas were removed by means of dilute hydrochloric acid.

Bone, ivory and wood were strengthened with a hot thin solution of gelatin followed by formalin vapour. Creosote and arsenite of soda were used to protect wood against fungus and insects. Bronze and lead were treated by Finkener and Krefting's methods, and superficially rusted iron, by Blell's method. In the case of completely oxidized iron objects, the upper layer of ferric hydroxide was removed mechanically; the black cone of ferrosoferric oxide thus exposed, being more pleasing and metallic in appearance. All the metallic objects, after necessary cleaning and washing in distilled water, were impregnated with paraffin-wax. Dilute sulphuric acid has been employed with success for cleaning coins of silver alloyed with copper as well as those of the latter metal alone. Weak potassium cyanide solution was used for removing black stains on silver coins.

The various objects treated in the year 1918-19 were these:—Stucco, 94; terracotta, 1,198; stone, 114; clay, 11; copper and bronze, 758; iron, 683; silver, 31; gold, 8; wood, 1; bone and ivory, 138; lead, 14; glass, 46; miscell, 11. Grand total, 3,107.

The Archæological Chemist was deputed to Konarak to report on the decay affecting some portions of the Black Pagoda; also, to Taxila, to overhaul the collection of antiquities recovered in my excavations there.

Museums. Generally speaking the museums throughout the country have substantial progress to report in the year 1918-19. The new Museum at Patna, thanks to the keen enthusiasm of the Local Government and to the efficient management of Mr. Monoranjan Ghosh, a former scholarship-holder in this Department, is very rapidly extending its collection in all branches, especially, perhaps, in the epigraphic field, and much important material is being brought together under an arrangement to be described in the next paragraph. The accommodation provided at the various centres for this steadily growing material is, however, all too inadequate in most cases. This applies particularly to the Muttra Museum and to the Museum at Peshawar, but it is hoped that extended accommodation at both places can be realised without undue delay, now that the war is over. The Varendra Research Society, Rajshahi, I understand, is definitely proposing to erect a new building which has been rendered possible by the liberality of its President, and it is hoped that additional accommodation can be put at the disposal of the Rajputana Museum from time to time as opportunity offers. Expansion is everywhere the order of the day, and a hopeful sign of the times is the increasing desire which our institutions show for improved facilities for scientific treatment and display of their materials and their preservation along modern lines. It is only from Dacca that discouraging reports are received. Here, the Bengal Government have recently intimated their unwillingness to bear, in future, the whole cost of maintenance, and are of opinion that, if subscriptions are not forthcoming locally, the active extension of this collection should be definitely abandoned and the Museum be kept up merely in its present state. From some points of view this seems to be a very regrettable decision, but, on the other hand, it is a direct challenge to the Dacca public to support their own institution

more adequately, and it is not impossible that it may lead to a gratifying increase in local interest.

Fresh acquisitions.

A detailed report on the working of the Archæological Section of the Indian Museum, Calcutta, is given in Appendix E to this report, and the information therein contained need not be repeated at this place. The important and very flourishing Museum of the Varendra Research Society, Rajshahi, reports 152 fresh acquisitions during the year. A notable event in the history of this Museum was their undertaking an excavation at Deopara in the Rajshahi District, where the Padumsahai tank was explored at a cost of some Rs. 2,000 jointly contributed by the President, Kumar Sarat Kumar Roy Bahadur of Dighapatia, and the District Board of Rajshahi. In all 129 separate fragments were recovered in the course of this work, the most important of these being a fragmentary statue of Ganga and images of Hariti and Vaisravana, Yamaraja and Karttikeya. The Curator of the Dacca Museum reports that the only additions to the Archæological Section of his institution are a mixed metal statue of an eight-armed Buddhist Goddess, possibly dating back to the 7th or 8th century, from the Tippera District, an iron cannon dug up in Dacca, and a large sandal-wood image of Vishnu, also from Tippera, in addition to 84 coins received from the various Local Governments. The new additions to the Patna Museum number 885 specimens in the Archæological and 291 in the Numismatic Section, but these include the antiquities recovered by the Archæological Department at Basarh in the Muzaffarpur District during the excavations of 1911-12. A further important development in the Patna Museum has come about through the employment by the Local Government of a special epigraphical assistant employed to tour throughout the province and bring back impressions of all the notable inscriptions occurring in that area. In this way it is hoped that little by little the Patna Museum will be able to get together a complete record of the epigraphical documents in Bihar and Orissa, to be used in connection with the Archæological and Epigraphical Departments of Patna University. In the Western Circle Mr. Banerji reports that the most important addition to the Prince of Wales Museum was the collection of four large basreliefs brought from Badami. The Museum has also purchased a collection of 27 South Indian bronze images containing a fine set of the representations of the ten incarnations of Vishnu, and has similarly acquired by purchase one gold coin and 169 silver Moghul coins from Central India. The Poona Museum has received 181 coins as Treasure Trove from various Local Governments and 63 coins have been added to the cabinet of the Bombay Branch of the Royal Asiatic Society of which 15 are gold. The Bijapur Museum collection has been increased by the acquisition of some half a dozen paintings and two illuminated Persian manuscripts in addition to various minor antiquities. The Rajputana Museum at Ajmer has added two sculptures to its Archæological collection. One of these is the head of a marble Jain image found in the enclosure of the Arhai-din-ka-Jhompra at Ajmer and the other a fragment of sculpture representing the seven mothers. Pandit Gaurishankar Ojha further reports the receipt of 82 Treasure Trove coins from the various

Local Governments, together with a few coins received from the Palanpur State. The only acquisitions reported from Baroda are coins, mostly Muhammadan issues, while the Sardar Museum at Jodhpur has acquired by purchase a dozen gold coins of the Gupta Dynasty, and the Cabinet of the Watson Museum at Rajkot has been enriched by 191 silver Moghul coins found at Vadgam which have been presented by the Talukdars of Dasada. Mr. Longhurst reports that in addition to other antiquities 28 metal images of various Hindu Gods were acquired as Treasure Trove and added to the Madras Museum collection, which is a very exceptional number for any one year. The additions to the Archæological Section of the Central Museum, Lahore, consisted of 9 Greek Didrachms purchased by the Curator, and a series of old paintings of the Basohli School, from his study of which the Curator comes to the conclusion that (1) the Basohli School is possibly of pre-Moghul origin and that (2) the so-called "Tibeti" pictures are nothing but late productions of this school. At Muttra Rai Bahadur Radha Krishna has added to his collection 56 stone sculptures—mostly acquired at his own expense—and a fine set of clay moulds for forging punchmarked coins which were recovered in excavation in the Katra Mound. 14 Gandhara fragments have been acquired by exchange, which are said to have been found at Madhuban and Mahauli near Muttra about a hundred years ago. At Lucknow the catalogue of the Moghul coins has been brought up-to-date and considerable progress has been made in listing the Gupta and Pathan Kings. The Curator further reports the acquisition of a number of Gandhara and Magadha sculptures from the Indian Museum, Calcutta, and 243 coins. The only antiquities added to the collection at Sarnath were the sculptures recovered by Rai Bahadur Daya Ram Sahni which have been already referred to above. They include a statue of Tryambak Mahadeo or possibly Bhairava of hitherto unknown type and an interesting two-armed seated image of Vajrasattva. In Burma during the year under report 51 coins were added to the coin cabinet of the Phayre Provincial Museum, Rangoon, which were all received as Treasure Trove from India. The Peshawar Museum has added to its coin cabinet 3 gold and 298 silver coins acquired for the Museum under the Treasure Trove Act by the Government of the North-West Frontier Province and 38 coins from other provinces, in addition to a collection of pottery from Seistan loaned by the Director-General of Archæology and miscellaneous antiquities from various sources, while the Delhi Museum reports the acquisition of 46 new exhibits, in addition to 354 coins received as Treasure Trove.

Listing of Monuments.

In Bihar and Orissa a large number of sites and monuments have been visited by the Assistant Superintendent in the Tirhut Division and he has been engaged also in arranging the material for the Tirhut Volume of the list of monuments for publication and in preparing illustrations which are to accompany it. In the course of this work the late Mr. Panday made several discoveries of unusual interest, namely, a badly damaged bull-capital of seemingly Mauryan age (found at Salempur in the Hajipur Sub-division), an inscribed fragment of a Kushan railing in a small ruined temple at Jharua (within the Hajipur Municipality), and the valuable Sunga column shown in Plate IX, fig. *b*, which

was found in the compound of the Mahadeva Math at the village of Rajasan. Mr. Panday also discovered the broken head of a lion which he believes to have been originally on some Asoka column, at a place called Masarh, six miles W. S. W. of Arrah, but the identification, though reasonable and indeed probable, needs verification. The piece is built up in the compound wall of the temple of Bhagavati, which stands on a mound at Masarh, and as the Archæological Society of Patna College is said to have found another fragment near here which seems of similar age and nature, it is possible that this mound covers remains of great interest and importance. Mr. Panday also had the good fortune to discover, while on a visit to Bheraghat near Jubbulpore, two statues with Kushan inscriptions lying in a jungle near the Dhuandhar waterfall, but unfortunately opportunity did not offer for a decipherment of these records. The listing of monuments in the Delhi Province is expected to be finished by the next rainy season. In the Frontier Province 52 new sites have been examined and listed, completing the number of those in the Nowshera Tahsil, which contains five interesting 'baolis' or drinking wells.

A. M. P. Act.

In the Western Circle some slight damage is reported to have been done to the Malik-i-Maidan Gun in spite of the gate leading to the bastion being locked up at night. A portion of the ear of the lion's head at the mouth of the Gun was broken and pieces of metal resembling this ear were found in the possession of a goldsmith who stated that he had received the fragments from a police constable. The official enquiry into this case was not complete before the end of the year. No damage to any monuments in any of the other circles came to the notice of this Department during the year under report.

Treasure Trove.

Several Treasure Trove finds of coins were reported during the year under review and comprised 3,992 specimens. 2,155 coins come from the Bombay Presidency, 324 from Bengal, 1,005 from Bihar and Orissa, 48 from the Central Provinces and 460 from the Frontier Province. The find from Nadia in Bengal includes 3 very rare coins of Aurangzeb struck at Akbarnagar (Rajmahal) and several varieties of *Nisars*, small pieces struck for largess on ceremonial occasions by the Mughal Emperors, which are of considerable importance. The find from Pabna (also in Bengal) deserves special notice, as it contains several uncommon types of the Suri period. Among Treasure Trove finds other than coins may be mentioned an inscribed copper plate found in the Darbhanga District of Bihar and Orissa, and 12 stone axe-heads in the Pakokku District in Burma.

Tours.

The tours of the Archæological Superintendents are chronicled in their respective reports and need not be repeated here. My own movements embraced visits to Taxila, Sanchi, Bhopal, Agra and Bombay. I was encamped at Taxila for nearly 10 weeks and about 5 weeks at Sanchi in order to supervise conservation works which were in progress at those places. Dr. Spooner's movements, first as Assistant Director-General and subsequently as Officiating Director-General, were confined to Agra, Sanchi and Taxila.

Publications.

The following publications were issued during the year :—

1. Annual Report of the Director-General of Archæology in India. Part I, for the year 1916-17.

2. Annual Report of the Director-General of Archæology in India, Part II, for the year 1915-16.
3. Annual Reports of the Southern, Western, Eastern, Northern, Frontier and Burma Circles, as well as the Epigraphical Report of the Assistant Archæological Superintendent for Epigraphy, Southern Circle, for the year 1917-18.
4. A Guide to Sanchi, by Sir John Marshall.
5. A Guide to Taxila, by Sir John Marshall.
6. The Astronomical Observatories of Jai Singh, by Mr. G. R. Kaye.
7. Bijapur and its Architectural Remains, by Mr. Henry Cousens.
8. *Epigraphia Indica,* Vol. XIII, Pt. vii; Vol. XIV, Pts. i to vi.
9. List of photographic negatives stored in the Office of the Superintendent, Muhammadan and British Monuments.

In addition to the above, an atlas showing the places of archæological interest for the whole of Bihar and Orissa is under preparation by the Assistant Archæological Superintendent, Eastern Circle, and the maps of three divisions were completed during the year. It is proposed to publish them in one volume as soon as all the remaining divisions are ready.

A Volume on "South Indian Architecture" is under preparation by Mr. A. H. Longhurst, Superintendent, Southern Circle, who has published a first instalment of his work in Part II of his Report for the year.

Mr. V. Rangacharya's volume, the "Topographical List of inscriptions in the Madras Presidency," for which the Government of India awarded an honorarium to the compiler, was completed, and the South Indian Inscriptions, Vol. III, Part III, was passed on for final proof.

In accordance with the new orders passed by the Government of Madras in July 1918 for collecting inscriptions and publishing them more expeditiously, some 2,121 folio pages of manuscript containing texts of 1,176 inscriptions were sent to Press. A separate detailed report was also submitted to Government on the subject.

Library.

Two hundred and eighty-five new volumes including periodicals were added to the Central Library, Simla, of which 32 were purchased and 253 were obtained in exchange for our own publications.

Photographs.

A list of photographic negatives prepared during the year is published as Appendix D to this report.

Personnel.

Sir John Marshall was obliged to take three months' privilege leave on medical certificate, when Dr. D. B. Spooner, Superintendent of the Eastern Circle, officiated for him. During this period as well as later on, when Dr. Spooner was appointed Assistant Director-General of Archæology, Mr. K. N. Dikshit, Curator of the Provincial Museum, Lucknow, held charge of the Eastern Circle. Mr. H. Panday, Assistant Superintendent, Eastern Circle, was on privilege leave for six weeks. Pandit V. Natesa Aiyar, Superintendent of the Frontier Circle, was on privilege leave for a month and again on furlough for about 6 months beginning from the 2nd of January 1919, and his assistant Khan Sahib Mian Wasi-ud-Din acted for him. In the South Mr. Longhurst

availed himself of three months' privilege leave and during this period Rao Sahib H. Krishna Sastri Avargal, Assistant Archæological Superintendent for Epigraphy, held charge of the current duties of this Circle. Later on Mr. Sastri himself went on three months' privilege leave, when his assistant Mr. Venkova Rao acted for him.

A new post was added temporarily to the cadre of the Survey this year, namely, that of Assistant Director-General of Archæology in India, and Dr. D. B. Spooner was selected to hold it.

Scholarships. The Sanskrit scholarship held by Mr. M. Ghose, M.A., remained vacant after he was appointed Curator of the Patna Museum in October 1918. The other scholarship for Sanskrit was held by Prof. Rama Prasad Chanda. The architectural scholarships held by Messrs. G. C. Chandra and B. L. Dhama were extended for another year and the scholars remained attached to the Office of the Superintendent, Muhammadan and British Monuments. In Burma Maung Hla, B.A., was appointed a temporary Archæological Assistant and the scholarship was awarded to Maung Ba Aung, B.A.

JOHN MARSHALL,

Director-General of Archæology.

APPENDIX A.

Special grants-in-aid.—The following allotments were made out of the special grant of one lakh provided by the Government of India :—

	Rs.
Archæological Chemist's Travelling Allowance and Contingencies	3,500
Conservation at Sanchi	14,000
Conservation at Taxila	15,000
Purchase of antiquities	3,000
Library	3,000
Publication of Bakhsali Manuscripts	2,400
Archæological Chemist's pay	3,800
Monseiur Foucher's honorarium	5,000
Bombay	10,000
Bihar and Orissa	3,277
United Provinces	2,863
Punjab	7,000
N.-W. F. Province	2,000
Burma	12,000
Dr. Tessitori's pay	1,200
Dr. Tessitori's photographer	1,500
Bijapur Museum	4,000
Ajmer	1,000
Delhi (Conservation)	3,960
Archæological Superintendent, Eastern Circle, for purchase of tents	1,500
TOTAL	1,00,000

APPENDIX B.

Expenditure on the Archæological Department for the year 1918-19.

		Rs.
Southern Circle	Archæology	19,470
	Epigraphy	26,951
Western Circle		33,685
Eastern Circle		36,649
Northern Circle	Superintendent, Hindu and Buddhist Monuments	16,353
	Superintendent, Muhammadan and British Monuments.	22,160
Frontier Circle		20,842
Burma Circle		36,296
Director-General of Archæology including Government Epigraphist and the Epigraphist for Moslem Inscriptions		84,136
TOTAL		2,96,542

APPENDIX B—*contd.*

Expenditure on conservation, etc., including grants-in-aid from Imperial Revenue.

		Rs.
Madras		19,887
Bombay		52,754
Central India (Dhar State)		3,257
Ajmer		165
Bengal		13,409
Bihar and Orissa		16,704
Assam		2,087
Central Provinces		9,580
Punjab	Hindu and Buddhist Monuments	4,491
	Muhammadan and British Monuments	26,275
United Provinces	Hindu and Buddhist Monuments	4,971
	Muhammadan and British Monuments	38,660
Delhi		71,831
Burma		50,269
N.-W. F. Province		2,000
Sanchi (Central India)		14,000
Taxila		15,000
	TOTAL	3,45,340

Special charges.

	Rs.
Salary of Archæological Chemist	3,800
Travelling allowance and contingencies of the Archæological Chemist	3,500
Antiquities	1,919
Library	1,435
Honorarium to Monsieur A. Foucher	5,000
Pay of Dr. L. P. Tessitori	1,200
Pay of his photographer including his travelling allowance and contingencies.	1,500
Show-cases for Bijapur Museum	4,000
Coin cabinet for Ajmer Museum	1,000
Epigraphia Indica and Epigraphia Indo-Moslemica	4,960
Honorarium for editing *Epigraphia Indica*	1,500
Other Archæological Publications	4,804
TOTAL	34,618

APPENDIX C.

Drawings and photographs prepared by the Department.

		Drawings.	Photographs.
Southern Circle	Archæology	10	80
	Epigraphy	..	38
Western Circle		43	187
Eastern Circle		10	83
Northern Circle	Superintendent, Muhammadan and British Monuments.	56	122
	Superintendent, Hindu and Buddhist Monuments.	19	164
Frontier Circle		..	60
Burma Circle		40	140
Director-General of Archæology		1	405
	TOTAL	179	1,279

APPENDIX D.

List of the Photographic negatives prepared by the office of the Director-General of Archæology in India during the year 1918-19.

No.	Place and District.	Description.	Size.
1-2	Ajanta (Hyderabad).	General views of Ajanta hill	$8\frac{1}{2}\times6\frac{1}{2}$
3	,,	General view of the Caves	,,
4	,,	Cave I : Bodhisattva (Avalokitesvara)	,,
5	,,	Cave I : A palace scene	,,
6	,,	Cave I : Back view of seated girl	,,
7	,,	Duplicate	,,
8	,,	Interior of Cave No. 2	,,
9	,,	Cave XVII : Mother and child adoring the Buddha	,,
10	,,	Cave XVII : Group of Celestial Musicians	,,
11	,,	Cave XVII : Elephant driver from the Ceylon Battle	,,
12	,,	Specimen of decorative border	,,
13-14	Sanchi (Bhopal State).	The hill of Sanchi : View from the Railway Station	12×10
15	,,	Great Stupa : General view from S.	,,

APPENDIX D—*contd.*

No.	Place and District.	Description.	Size.
16	Sanchi (Bhopal State).	Duplicate	12 × 10
17-18	Sanchi Museum.	Great Stupa and other remains : General view . . .	8½ × 6½
19	,,	Asoka Column	12 × 10
20	,,	,, ,, Lion Capital	,,
21	,,	Great Stupa : Detail of railing pillar (Stairway landing) .	8½ × 6½
22	,,	,, Detail of stairway railing, pillars . . .	,,
23	,,	,, Newel post, west side	,,
24	,,	,, Berm railing, 8 pillars	,,
25	,,	,, ,, 6 ,, ...	,,
26	,,	,, ,, 3 ,, ...	6½ × 4¾
27	,,	,, ,, 5 ,, ...	,,
28-32	,,	,, ,, 10 ,, (2 pillars in each plate) .	,,
33	,,	North gateway	8½ × 6½
33*a*	,,	,, ,, lower and middle architraves from inside .	12 × 10
33*b*	,,	Great Stupa : West gate : Three architraves from inside .	,,
34	,,	Great stupa : South gateway : Lower and middle architraves. Back view (Chhadanta Jataka and war of relics) . .	8½ × 6½
35	,,	Great Stupa : West gateway : Lower and middle architraves. Back view	,,
36	,,	Duplicate	,,
37	,,	Great Stupa : Seated Buddha opposite the South gateway .	,,
37*a*	,,	Duplicate	,,
38	,,	Stupa III. Ground railings : detail of a pillar . . .	,,
39	,,	,, ,, ,, detail of another pillar . .	,,
40	,,	,, detail of a lotus ornament on a pillar . .	6½ × 4¾
41	,,	,, Ground railing : lotus decoration from another pillar	,,
42	,,	Stupa III. Stone Umbrella	,,
43	,,	Stupa V. Seated Buddha in front of Stupa 5 . . .	8½ × 6½

APPENDIX D—*contd.*

No.	Place and District.	Description.	Size.
44	Sanchi Museum.	Elephant from temple 40 (Cat. No. A-11)	$8\frac{1}{2}\times6\frac{1}{2}$
45	,,	Asokan Umbrella (Cat. No. A-2)	$6\frac{1}{2}\times4\frac{3}{4}$
46	,,	,, bowl (Cat. No. A-10)	$8\frac{1}{2}\times6\frac{1}{2}$
47	,,	West gateway, North pillar (Cat. A-20)	,,
48	,,	South ,, East ,, (Cat. A-15)	,,
49	,,	,, ,, ,, ,, Smaller	,,
50	,,	,, ,, ,, ,, North face	,,
51	,,	Fragment from East pillar of South gateway (Cat. No. A-17).	,,
52	,,	,, ,, West ,, ,, ,, (Cat. No. A-14).	,,
53	,,	East end of the middle architrave, South gateway (Cat. No. A-23)	,,
54	,,	Fragment of bracket tree (Cat. No. A-28)	,,
55	,,	Another bracket tree (Cat. No. A-27).	,,
56	,,	,, with a Yakshi figure (Cat. Nos. 25 and 26).	,,
57	,,	Upright separating the architraves (Cat. No. A-47) . .	,,
58	,,	Bust of a double-bodied Yakshi (B.-27) and head of a figure (B.-22 and 2)	$6\frac{1}{2}\times4\frac{3}{4}$
59	,,	Winged lion from a gateway (Cat. No. A-39)	$8\frac{1}{2}\times6\frac{1}{2}$
60	,,	Another ,, (Cat. No. A-22)	,,
61	,,	Ditto ,, (Cat. No. A-37)	,,
62	,,	Bracket tree from a gateway (Cat. No. A-63)	$6\frac{1}{2}\times4\frac{3}{4}$
63	,,	Fragmentary inscribed railing pillar with a he-goat in the Central medallion (Cat. No. A-71)	$8\frac{1}{2}\times6\frac{1}{2}$
64	,,	Stone sculptures (A-70 and B-57)	$6\frac{1}{2}\times4\frac{3}{4}$
65	,,	Railing pillar in the Courtyard (Nos. 100 and 101) . . .	,,
66	,,	Inscribed stone bowl (Cat. No. B-1)	,,
67	,,	,, headless statue of Vasishka (Cat. No. A-82) . .	$8\frac{1}{2}\times6\frac{1}{2}$
68	,,	Inscribed Votive tablet with Nandipada symbol (Cat. No. A-85)	12×10

APPENDIX D—*contd.*

No.	Place and District.	Description.	Size.
69	Sanchi Museum.	Pedestal of a standing statue Mathura School (Cat. No. A-83)	$8\frac{1}{2}\times6\frac{1}{2}$
70	,,	Another pedestal (Cat. No. A-84)	,,
71	,,	Headless standing Buddha (Cat. No. A-87). . . .	$6\frac{1}{2}\times4\frac{3}{4}$
72	,,	,, seated ,, (Cat. No. 20)	$8\frac{1}{2}\times6\frac{1}{2}$
73	,,	Piece of halo (Gupta) (Cat. No. A-94).	$6\frac{1}{2}\times4\frac{3}{4}$
74	,,	Halo in 3 pieces (Gupta) (Cat. No. A-107)	,,
75	,,	Damaged lion (Cat. No. A-108)	,,
76	,,	Lion Capital of Gupta pillar (Cat. No. A-81) . . .	$8\frac{1}{2}\times6\frac{1}{2}$
77	,,	Naga, standing (A-102)	,,
78	,,	Capital of a pilaster (A-96)	$6\frac{1}{2}\times4\frac{3}{4}$
79	,,	Buddha seated on a chair in preaching attitude (A-105) .	,,
80	,,	Fragmentary sculpture (A-113)	,,
81	,,	Ganesha and another figure (Nos. A-90 and A-123) . .	,,
82	,,	Stone head (Cat. No. B-32)	,,
83	,,	,, (Cat. Nos. B-53, 34 and 50)	,,
84	,,	Head of Avalokitesvara (Cat. No. B-44)	,,
85	,,	Three heads (Cat. Nos. B-47, 48 and 52)	,,
86	,,	Head of a female deity (Cat. No. B-45)	,,
87	,,	Three heads (Cat. Nos. B-30, 42 and 43)	$8\frac{1}{2}\times6\frac{1}{2}$
88	,,	Standing statue (Cat. Nos. B-56 and 62)	$6\frac{1}{2}\times4\frac{3}{4}$
89	,,	Seated Buddha (Cat. No. 23)	$8\frac{1}{2}\times6\frac{1}{2}$
90	,,	Stone sculpture (Cat. No. 30)	,,
91	,,	Other sculptures (Cat. Nos. 30 and 31)	,,
92	,,	Carved door-jamb (Cat. No. 45)	,,
93	,,	Two bell-shaped capitals of small pillars (Cat. Nos. 131 and 132)	$6\frac{1}{2}\times4\frac{3}{4}$
94	,,	Two pillars (Cat. Nos. 130 and 137)	,,
95	,,	Carved pieces of stone from the *Sikhara* of temple 45 (Cat. No. 167)	,,

APPENDIX D—*contd.*

No.	Place and District.	Description.	Size.
96	Sanchi Museum.	Votive Stupa with four seated figures of Buddha in niches .	$8\frac{1}{2}\times6\frac{1}{2}$
97	,,	Bell-shaped capital of a Gupta, pillar	$6\frac{1}{2}\times4\frac{3}{4}$
98	,,	Front wall of the Museum	$8\frac{1}{2}\times6\frac{1}{2}$
99	,,	Iron antiquities Nos. 1, 2, 3, 5, 6, 7, 8, 13, 14, 20, 21, 22, 23, 24, 25, 28, 29, 31, 32, 33, 34, 35, 36 and 64 . . .	,,
100	,,	Iron antiquities Nos. 42, 45, 60, 61, 66, 67, 72, 77, 90, and 95	,,
101	,,	Copper *degchi* and iron vessel Nos. 481 and 43 . . .	,,
102	,,	Iron antiquities Nos. 55, 57, 64, 66, 99, 101, 102, 109, 114, 115, 116, 122, 123, 124, 361, 393, 404, 428, 430, 431, 434, 437, 439, 440, 442 and 444	,,
103	,,	Iron nails, chains, etc., Nos. 127, 130, 134, 139, 151, 201, 206, 390, 392, 226, 181, 281, 423, 418, 389, 426 . . .	,,
104	,,	Bronze bowl and copper bell Nos. 463 and 482 . . .	,,
105	,,	Bronze and copper objects Nos. 470, 471, 474, 489, 477 and 472	,,
106	,,	,, ,, Nos. 480, 486, 479, 484, 467 and 483	,,
107	,,	Pottery Nos. 493-496	,,
108	,,	Early glazed potteries Nos. 550, 498, 503, 531, 541, 540, 509, 497 and 511	,,
109	,,	Pottery Nos. 568, 572 and 651	,,
110	,,	,, Nos. 581, 592 and 593	,,
111	,,	,, Nos. 615, 655, 614, 612, 619, 819, 580, 603, 575, 567 and 576	,,
112	,,	Potsherds Nos. 630, 631, 634, 629, 641, 628, 637, 642, and 640	$6\frac{1}{2}\times4\frac{3}{4}$
113	,,	,, Nos. 624, 625, 627 and 704	,,
114	,,	Terracottas Nos. 647, 661, 650, 599, 598, 597, 707, 815, 657, 658, 699 and 690	,,
115	,,	Terracotta figures Nos. 745, 737, 741, 706, 705, 708, 751, 644 and 744	,,
116	,,	Clay seals (Gupta) Nos. 811, 754, 810, 814, 816, 759, 813, 769, 768, 758 and 756	,,
117	Sanchi	Tope II, General view from North	12×10

APPENDIX D—*contd.*

No.	Place and District.	Description.	Size.
118	Sanchi	Tope II, Ground railing pillar No. 1 ; W. face . . .	$8\frac{1}{2} \times 6\frac{1}{2}$
119	,,	,, ,, ,, Nos. 1 & 2, inner or south face	,,
120	,,	,, ,, ,, ,, 1 & 2 outer face. .	,,
121	,,	,, ,, ,, ,, 2 & 3 ,, ,, . .	,,
122	,,	,, ,, ,, ,, 3 & 4 ,, ,, . .	,,
123	,,	,, ,, ,, ,, 4 & 5, inner ,, . .	,,
124	,,	,, ,, ,, ,, 5 & 6 ,, ,, . .	,,
125	,,	,, ,, ,, No. 7, outer ,, . .	,,
126	,,	,, ,, ,, Nos. 8 & 9, inner ,, . .	,,
127	,,	,, ,, ,, ,, 10 & 11 ,, ,, . .	,,
128	,,	,, ,, ,, No. 14 ,, ,, . .	,,
129	,,	,, ,, ,, ,, 15 ,, ,, . .	,,
130	,,	,, ,, ,, Nos. 15 & 16, outer ,, . .	,,
131	,,	,, ,, ,, ,, 17 & 18 ,, ,, . .	,,
132	,,	,, ,, ,, No. 19, inner ,, . .	,,
133	,,	,, ,, ,, ,, 20 ,, ,, . .	,,
134	,,	,, ,, ,, Nos. 19 & 20 ,, ,, . .	,,
135	,,	,, ,, ,, No. 21 ,, ,, . .	,,
136	,,	,, ,, ,, Nos. 21 & 22, outer ,, . .	,,
137	,,	,, ,, ,, No. 23, north ,, . .	,,
138	,,	,, ,, ,, Nos. 23 & 24, inner ,, . .	,,
138*a*	,,	,, ,, ,, Duplicate	,,
139	,,	,, ,, ,, Nos. 23 & 24, outer face .	,,
140	,,	,, ,, ,, ,, 24 & 25 ,, ,, . .	,,
141	,,	,, ,, ,, ,, 25 & 26 ,, ,, . .	,,
142	,,	,, ,, ,, ,, 26 & 27, inner ,, . .	,,
143	,,	,, ,, ,, No. 27, north ,, . .	,,
144	,,	,, ,, ,, ,, 27, west ,, . .	,,

APPENDIX D—*contd.*

No.	Place and District.	Description.	Size.
145	Sanchi	Tope II, Ground railing pillar Nos. 29 & 30, inner face .	$8\frac{1}{2}\times6\frac{1}{2}$
146	„	„ „ „ „ „ 31 & 31 „ „ .	„
147	„	„ „ „ „ No. 36 „ „ .	„
148	„	„ „ „ „ Nos. 38 & 39, outer „ .	„
149	„	„ „ „ „ „ 40 & 41 „ „ .	„
150	„	„ „ „ „ „ 41 & 42, inner „ .	„
151	„	„ „ „ „ „ 43 & 44, outer „ .	„
152	„	„ „ „ „ „ 43 & 44, inner „ .	„
153	„	„ „ „ „ No. 44, west „ .	„
154	„	„ „ „ „ Nos. 48 & 49, inner „ .	„
155	„	„ „ „ „ No. 48, outer „ .	„
156	„	„ „ „ „ Nos. 49 & 50, inner „ .	„
157	„	„ „ „ „ „ 50 & 51, outer „ .	„
158	„	„ „ „ „ „ 51 & 52 „ „ .	„
159	„	„ „ „ „ „ 51 & 52, inner „ .	„
160	„	„ „ „ „ „ 65 & 66, „ „ .	„
161	„	„ „ „ „ „ 65 & 66, outer „ .	„
162	„	„ „ „ „ No. 66, north „ .	„
163	„	„ „ „ „ „ 67, outer or W. „ .	„
164	„	„ „ „ „ „ 67, inner or E. „ .	„
165	„	„ „ „ „ „ 68, inner „ .	„
166	„	„ „ „ „ Nos. 68 & 69, outer „ .	„
167	„	„ „ „ „ „ 70 & 71 „ „	„
168	„	„ „ „ „ „ 71 & 72, inner „ .	„
169	„	„ „ „ „ No. 72, outer „ .	„
170	„	„ „ „ „ Nos.73 & 74 „ „ .	„
171	„	„ „ „ „ „ 75 & 76, inner „ .	„
172	„	„ „ „ „ „ 75 & 76, outer „ .	„

Appendix D—*contd.*

No.	Place and District.	Description.	Size.
173	Sanchi	Tope II, Ground railing pillar, No. 54, inner face .	$8\frac{1}{2}\times6\frac{1}{2}$
174	,,	,, ,, ,, ,, Nos. 77 & 78 ,, ,, .	,,
175	,,	,, ,, ,, ,, ,, 79 & 80 ,, ,, .	,,
176	,,	,, ,, ,, ,, ,, 79 & 80, outer ,, .	,,
177	,,	,, ,, ,, ,, ,, 81 & 82, inner ,, .	,,
178	,,	,, ,, ,, ,, ,, 81 & 82, outer ,, .	,,
179	,,	,, ,, ,, ,, ,, 83 & 84 ,, ,, .	,,
180	,,	,, ,, ,, ,, ,, 85 & 86, inner ,, .	,,
181	,,	,, ,, ,, ,, ,, 85 & 86, outer ,, .	,,
182	,,	,, ,, ,, ,, ,, 87 & 88, inner ,, .	,,
183	,,	,, ,, ,, No. 88 ,, ,, .	,,
184	,,	,, ,, ,, ,, Nos. 87 & 88, outer ,, .	,,
185	,,	,, ,, ,, ,, No. 88, east ,, .	,,
		IMPRESSIONS OF THE EARLY INSCRIPTIONS AT SANCHI.	
186	Sanchi	Impression of a Brahmi inscription	12×10
187	,,	Tope I, ground railing Nos. 73—101	,,
188	,,	,, East gate, Nos. 1—16	,,
189	,,	,, ,, Nos. 17 to 49 and pavement slabs (loose), Nos. 1—35	,,
190	,,	,, Berm rail, loose 73-138	,,
191	,,	,, ,, ,, 139-143 Hti Rail No. 1—4 Stairway rail Nos. 1—20 and pavement slabs loose Nos. 36—41	,,
192	,,	Tope II, Ground rail, Nos. 53—66; pavement slabs, Nos. 1—3; stairway steps, Nos. 1 and 2; stairway rail loose No. 1 and berm rail loose Nos. 1 to 17	,,
193	,,	Tope III, Nos. 1—17	,,
194	,,	Miscellaneous impressions Nos. 1—51.	,,
195	,,	Kushan and later Nos. 1—9	,,
196	,,	Miscellaneous impressions Nos. 10—12	,,

APPENDIX D—*contd.*

No.	Place and District.	Description.	Size.
197	Sanchi	Impressions of a Gupta inscription on a stone in 14 pieces (Cat. No. C)	12 × 10
198	Multan	The Wali Mohammad mosque, inscription on the central arch.	$6\frac{1}{2} \times 4\frac{3}{4}$
199	,,	Baha-ul-haq. General view of tomb from S.-W. . . .	$8\frac{1}{2} \times 6\frac{1}{2}$
200	,,	,, Detail of wood-work in the S. door . .	$6\frac{1}{2} \times 4\frac{3}{4}$
201	,,	,, Inscription on the E. wall, ouside . . .	$4\frac{1}{4} \times 3\frac{1}{4}$
202	,,	,, Detail of tile work, west entrance . . .	,,
203	,,	,, Detail of tile work, another panel . . .	,,
204	,,	Hafiz Jamal. General view of shrine from N.-E. . . .	$6\frac{1}{2} \times 4\frac{3}{4}$
205	,,	,, South Entrance	,,
206	,,	,, Inscription on the east entrance	,,
207	,,	,, Detached inscription on 4 *kashi* tiles . .	,,
208	,,	Idgah. General view from S.-E.	$8\frac{1}{2} \times 6\frac{1}{2}$
209	,,	Jalal Uwaisi. General view from S.-E.	$6\frac{1}{2} \times 4\frac{3}{4}$
210	,,	Muhammad Said Khan's Tomb. General view from S. .	,,
211	,,	,, ,, ,, South entrance bearing inscription	,,
212	,,	Mai Mirhban. General view of tomb from S. . . .	,,
213	,,	Mai Pakdaman ,, ,, ,, E.	,,
214	,,	Nawab Yahya ,, ,, ,, N.-E.	,,
215	,,	Nawab Shah Mohammad Khan Badozai. Inscription on the inner face of north wall	,,
216	,,	Rukn-i-Alam, General view from S.-W. . . .	$8\frac{1}{2} \times 6\frac{1}{2}$
217	,,	,, ,, ,, S.-E.	$6\frac{1}{2} \times 4\frac{3}{4}$
218	,,	,, North wall showing tile work . . .	,,
219	,,	,, View of shrine from S.-W.	$4\frac{1}{4} \times 3\frac{1}{4}$
220	,,	Sher Shah's Mosque, Entrance	,,
221	,,	Shah Husain. View of shrine from S.-E.	$6\frac{1}{2} \times 4\frac{3}{4}$
222	,,	,, Mosque from S.-E.	,,

APPENDIX D—*contd.*

No.	Place and District.	Description.	Size.
223	Multan	Shamsud-Din (*alias* Shams-i-tabrez). View of the shrine from West	$6\frac{1}{2} \times 4\frac{3}{4}$
224	,,	,, Dastar and Tasbih of the saint . . .	,,
225	,,	,, Duplicate	,,
226	,,	,, Dalq of the saint	,,
227	,,	,, Sanad with the Custodian of the shrine . .	$4\frac{1}{4} \times 3\frac{1}{4}$
228	,,	Yusuf Gardez. View of the shrine from N.-E.	,,
229	,,	,, ,, ,, ,, S.-E.	$8\frac{1}{2} \times 6\frac{1}{4}$
230	,,	,, ,, Inner entrance of the porch from W. . .	$6\frac{1}{2} \times 4\frac{3}{4}$
231	,,	,, ,, Inscription in a niche on the north wall of the shrine	$4\frac{1}{4} \times 3\frac{1}{4}$
232	,,	,, ,, Inscription on the W. entrance	$6\frac{1}{2} \times 4\frac{3}{4}$
233	,,	,, ,, Inscribed slab in the wall to N. of the tank .	$4\frac{1}{4} \times 3\frac{1}{4}$
234	,,	,, ,, Inscribed wooden tablet over the E. entrance	,,
235	Baqirabad (Multan).	The Mosque from S.-E.	$6\frac{1}{2} \times 4\frac{3}{4}$
236	Sura Miyani (Multan).	Ali Akbar Shah's tomb. View from S.-E. . . .	,,
237	,,	,, ,, ,, View from W.	,,
238	,,	,, ,, ,, Detail of tile work in the S.-E. quadrant	,,
239	,,	Tomb of Ali Akbar Shah's mother. View from S.-W. .	,,
240	,,	,, ,, ,, View from W. . .	,,
241	,,	Mosque near Ali Akbar Shah's tomb. View from S.-E. . .	,,
242	,,	,, ,, ,, ,, View from N-.W., showing construction of the domes .	,,
243	Taxila (Jaulian).	View of Monastery from East	$8\frac{1}{2} \times 6\frac{1}{2}$
244	,,	Duplicate	,,
245	,,	Stucco figures, standing	,,
246	,,	,, heads	,,

APPENDIX D—*contd.*

No.	Place and District.	Description.	Size.
247	Taxila (Jaulian).	Seated Buddha of stucco with attendants (Fragmentary) .	$8\frac{1}{2} \times 6\frac{1}{2}$
248	,,	Duplicate	,,
249	,,	Seated stucco Buddha (headless)	,,
250	,,	Seated Buddha with two fragmentary attendants . .	,,
251	,,	Monastery	,,
252	,,	,, ...	,,
253	,,	,, ...	,,
254	Taxila Museum.	Stucco head from Jaulian	,,
255	,,	,, female figure (head and legs are missing) . .	,,
256	,,	,, heads	,,
257	,,	,, fragments	,,
258	,,	,, ,, ...	,,
259	,,	8 stucco heads	,,
260	,,	6 ,, ,, ...	,,
261	,,	2 ,, ,, ...	,,
262	,,	Stucco bust and another fragment	,,
263	,,	,, seated figure (headless)	,,
264	,,	43 pieces of birch bark Manuscript found at Jaulian . .	,,
265	,,	10 ,, ,, ,, ,, ,, . .	,,
266	,,	Gold jewellery and four coins	,,
267	,,	Duplicate	,,
268	,,	Die	$6\frac{1}{2} \times 4\frac{3}{4}$
269-272	,,	Taxila Coins	$8\frac{1}{2} \times 6\frac{1}{2}$
273	Ceylon	Standing Buddha from Anuradhapura (No. 39). Arms missing, 2nd century B.C.	,,
274	,,	Another standing Buddha. Arms missing (No. 95) . .	,,

APPENDIX D—*contd.*

No.	Place and District.	Description.	Size.
275	Ceylon	9 Stucco heads	$8\frac{1}{2}\times6\frac{1}{2}$
276	,,	10 ,, ,, ...	,,
277	,,	11 ,, ,, ...	,,
278	,,	11 ,, ,, ...	,,
279	,,	1 ,, head No. 50	,,
280	,,	Sculpture No. 46*a*	,,
281	,,	,, No. 46 B	,,
		ASOKAN EDICTS.	
282	Allahabad	Pillar Edict	$8\frac{1}{2}\times6\frac{1}{2}$
283	Bairat (Jaipur)	,, ,, ...	,,
284	,,	,, ,, ...	,,
285	Bhabra (Patna)	,, ,, ...	,,
286	,,	,, ,, ...	$6\frac{1}{2}\times4\frac{3}{4}$
287	Delhi	Delhi Meerut pillar (Edict)	$8\frac{1}{2}\times6\frac{1}{2}$
288	,,	,, ,, ,, ...	,,
289	,,	,, ,, ,, ...	,,
290	,,	,, ,, ,, ...	,,
291-295	,,	Delhi Siwalik pillar (Edict)	,,
296-299	,,	,, ,, ,, North side	$6\frac{1}{2}\times4\frac{3}{4}$
300-315	Dhauli	Rock Edicts	$8\frac{1}{2}\times6\frac{1}{2}$
316-338	Jaugada	Asokan Edicts	,,
339-353	Kalsi	,, ,, ...	,,
354	Maski	,, ,, ...	,,
355-362	Mathia or Lauriya Navandgarh.	,, ,, ...	,,
363-370	Radhia . .	,, ,, ...	,,
371-372	Rampurva .	,, ,, ...	12×10
373-374	Rupnath .	,, ,, ...	$8\frac{1}{2}\times6\frac{1}{2}$

APPENDIX D—*concld.*

No.	Place and District.	Description.	Size.
375	Sanchi . .	Asokan Edict	$8\frac{1}{2}\times 6\frac{1}{2}$
376	Supara . .	„ „	$6\frac{1}{2}\times 4\frac{3}{4}$
377-378	Sasram . .	„ „	$8\frac{1}{2}\times 6\frac{1}{2}$
379-380	Shabazgarhi .	„ „	„
381	Miscellaneous	Prehistoric implements	„
382	„	„ „	„
383-384	„	Farman of Mohammad Shah, face	„
385	„	„ „ „ back	„
386	„	„ of Akbar, face	„
387	„	„ „ back	„
388-392	„	Mohammadan coins	„
393	„	Later „	„
394	„	Arabic Astrolabe, 13th century, Obverse	„
395	„	„ „ „ Reverse	„
396	„	„ „ „ *Ankbut*	„
397	„	Persian Astrolabe, Obverse	„
398	„	„ „ Reverse	„
399	„	„ „ tablet for latitude 18°	$6\frac{1}{2}\times 4\frac{3}{4}$
400	„	„ „ „ „ 28°	„
401	„	„ „ „ „ 21°, 30° . . .	$8\frac{1}{2}\times 6\frac{1}{2}$
402	„	„ „ „ the Equator	„
403	„	Hindu Astrolabe, Obverse	„
404	„	„ „ Reverse	„
405	„	„ „ *Ankbut*	„

APPENDIX E.

Report of the Archæological Section, Indian Museum, for the year ending 31st March 1919.

Establishment.—Professor D. R. Bhandarkar, M.A., remained my deputy, holding charge of the Archæological Section throughout the year. Mr. Percy Brown, A.R.C.A., Principal, Government School of Art, Calcutta, continued to be the Exhibition Officer as last year. There was no change in the personnel of the office staff.

Leave.—The following officers were absent on privilege leave and for the following periods :—

Pandit B. B. Bidyabinod, Assistant Curator, for two months from 9th April to 8th June.

Maulavi Jamal-ud-din, Assistant Curator, for one month beginning with the 6th March.

Munshi Wahid-ud-din Ahmad, Markman, for one month and eight days, from the 6th July to 13th August.

Library.—Two hundred and eighty-two books, including the numbers of the various journals subscribed to, were added to the Library. Forty-three were purchased and the rest received as presentations.

Photographs.—Only one set of photographs was received during the year and that was from the Archæological Survey, Southern Circle.

Galleries.—Pandit B. B. Bidyabinod, Assistant Curator, continued to be the guide as usual.

Coin-room.—Professor Bhandarkar continued to be in charge of the coin-room and the coins.

New Acquisitions.—The following additions were made to the Archæological Collections :—

(*i*) Nearly seven hundred pieces of Central Asian antiquities, which were received from time to time from His Britannic Majesty's Consul General at Kashgar.

(*ii*) One hundred and seventy-nine pieces of enamelled tiles from Sind, presented by the Government of Bombay through the Superintendent, Archæological Survey, Western Circle.

(*iii*) One Iron beam (10′ 1″ × 6¼″ × 5½″) belonging to the Konarak temple of District Puri, forwarded by the Executive Engineer, Cuttack Division.

(*iv*) *Coins.*—Altogether 370 coins were added to the Coin Cabinet, 13 gold, 186 silver, 169 copper and 2 lead. Out of these, 86 coins were purchased and the rest received as presentations from the following donors :—

(*a*) Sikar Durbar.

(*b*) Jodhpur Durbar.

(*c*) Government of Bombay.

(*d*) Government of United Provinces.

(*e*) Government of Bihar and Orissa.

(*f*) Government of Bengal.

(*g*) Government of Punjab (N.-W. Frontier).

(*h*) Delhi Museum.

(*i*) Director of Agriculture, Central Provinces.

(*j*) Archæological Survey, Western Circle.

(*k*) Bombay Branch, Royal Asiatic Society.

(*l*) Office of the Director-General of Archæology in India.

Appendix E—*contd.*

A classified list of these coins added to the cabinet is given below :—

Class.	Pre-Muhammadan.	Gold.	Silver.	Copper.	Lead.
Punch-marked		...	22	2	...
Indo-Greek		...	9	7	...
Indo-Parthian		...	4	11	...
Kushan		...	...	14	...
Kushano-Sassanian		1	...	...	...
Kings of Kalinga		...	...	1	...
Western Kshatrapa		...	2	1	...
Unassigned Ancient coins of Northern India and Tribal		...	...	7	...
Andhra		...	...	...	2
Saurashtra		...	1	...	...
Traikutaka		...	1	...	...
Chola		...	...	9	...
Sassanian Dynasty of Persia		...	1	...	...
Indo-Sassanian		...	...	1	...
Gadhaiya		...	2	...	...
Hindu Kings of Ohind		...	4	8	...
South Indian Chakram		...	2	...	...
„ „ Mysore		2	...	...	...
Chinese		...	...	103	...
	Muhammadan.				
Sultans of Delhi		1	6	...	...
Sultans of Bengal		...	20	...	...
Mughal Emperor		1	111	5	...
Oudh		...	1	...	...
Native State		1	...	...	...
Aleppo		2	...	...	...
Egypt (Turkish)		3	...	...	...
Austrian (Rudolph II)		1	...	...	...
Persian		1	...	...	...
	Total	13	186	169	2

MISCELLANEOUS.

During this year I received representations from His Exalted Highness the Nizam's Government, the Curators of the Patna and Lucknow Museums, and the Secretary of the Varendra Research Society, Rajshahi, requesting me to present their Museums with duplicates of Archæological sculptures from the Indian Museum. The Curators of the Museums were asked to select personally the duplicates in question in consultation with the Officer-in-Charge. The pieces thus selected were thereupon placed with the Museums in question as loans with the sanction of the Trustees of the Indian Museum.

(b) According to the request of the Director of the Raffles Museum, Singapore, one monolith inscribed in Kawi character and emanating from that province was transferred to the Raffles Museum, as an "indefinite loan."

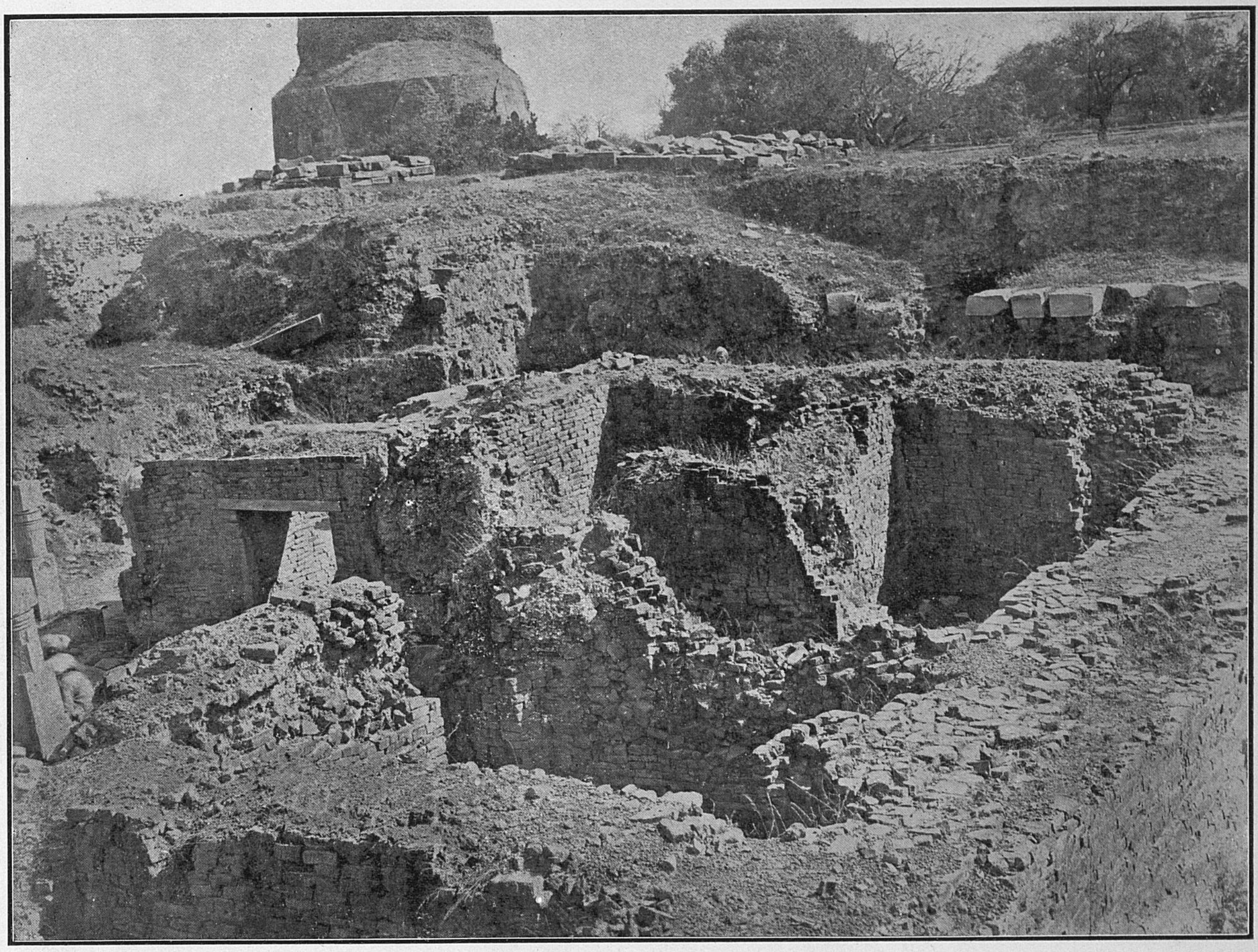
In this case also the usual permission of the Trustees to the Indian Museum was secured.

JOHN MARSHALL,
Director-General of Archæology in India.

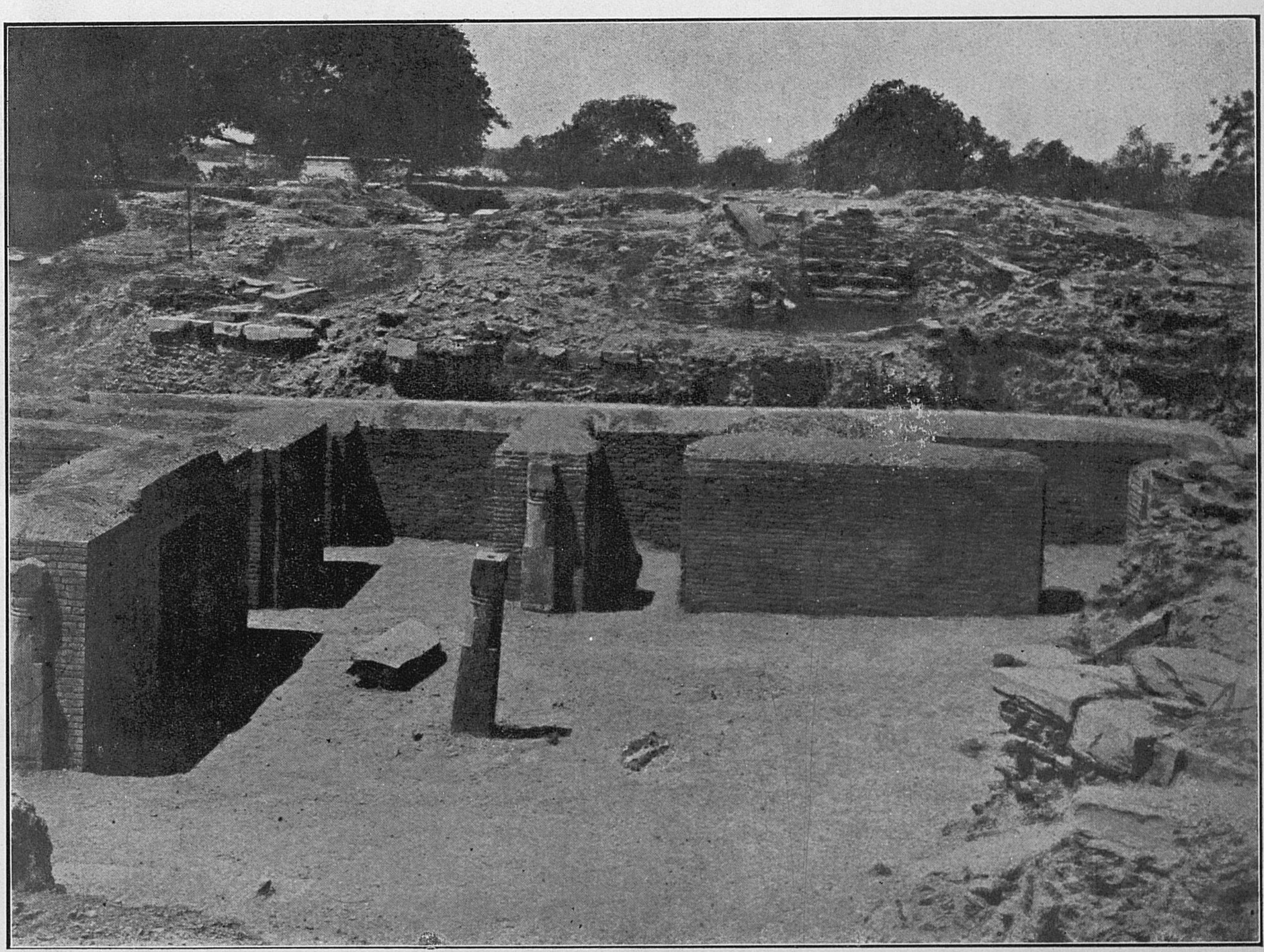
a. HAYATBAKSH GARDEN IN THE FORT, DELHI.

b. HAYATBAKSH GARDEN IN THE FORT, DELHI.

Photo.-engraved & printed at the Offices of the Survey of India, Calcutta, 1920.

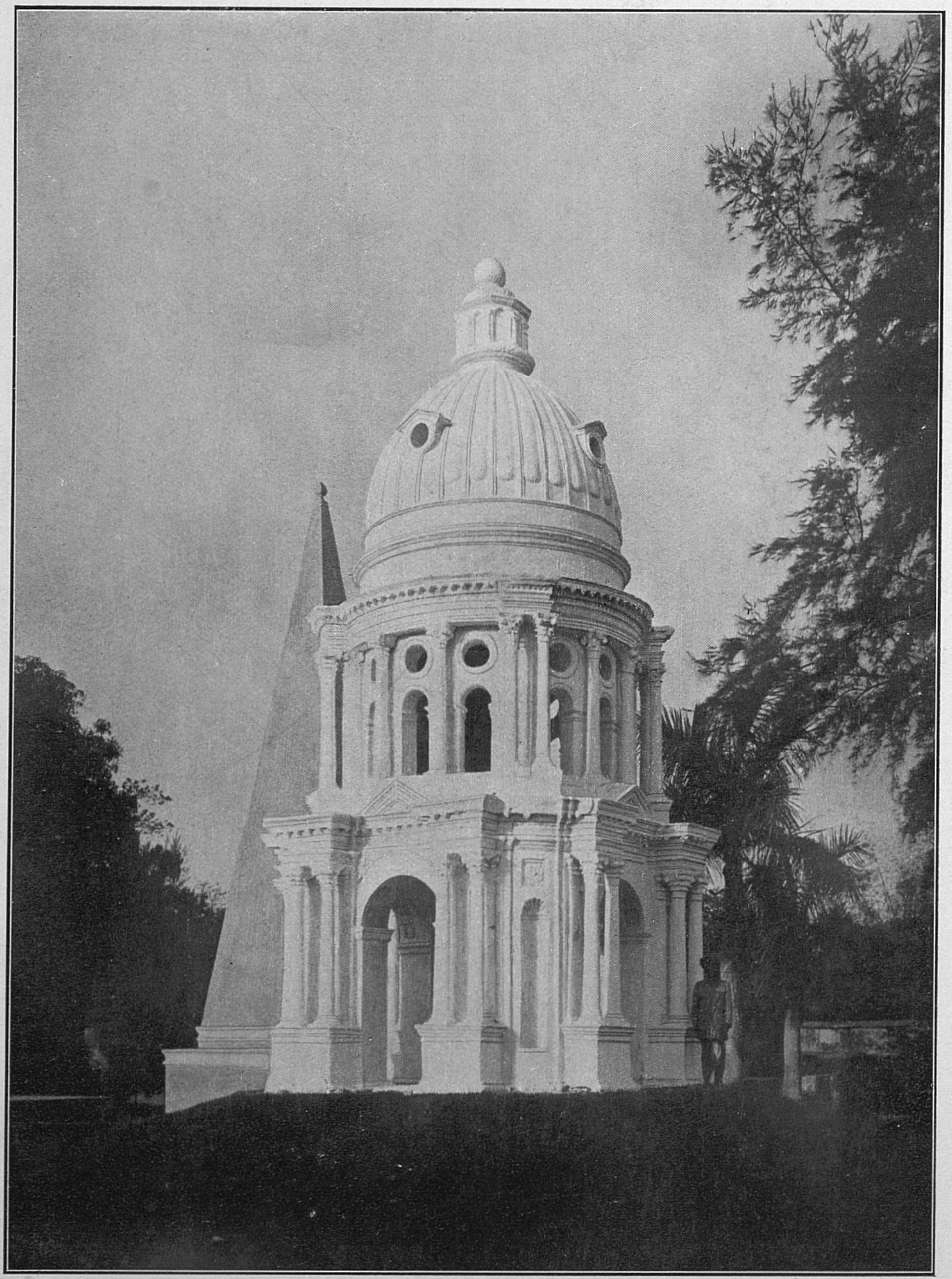


a. SARNATH: MONASTERY III, BEFORE CONSERVATION, FROM N.-W.

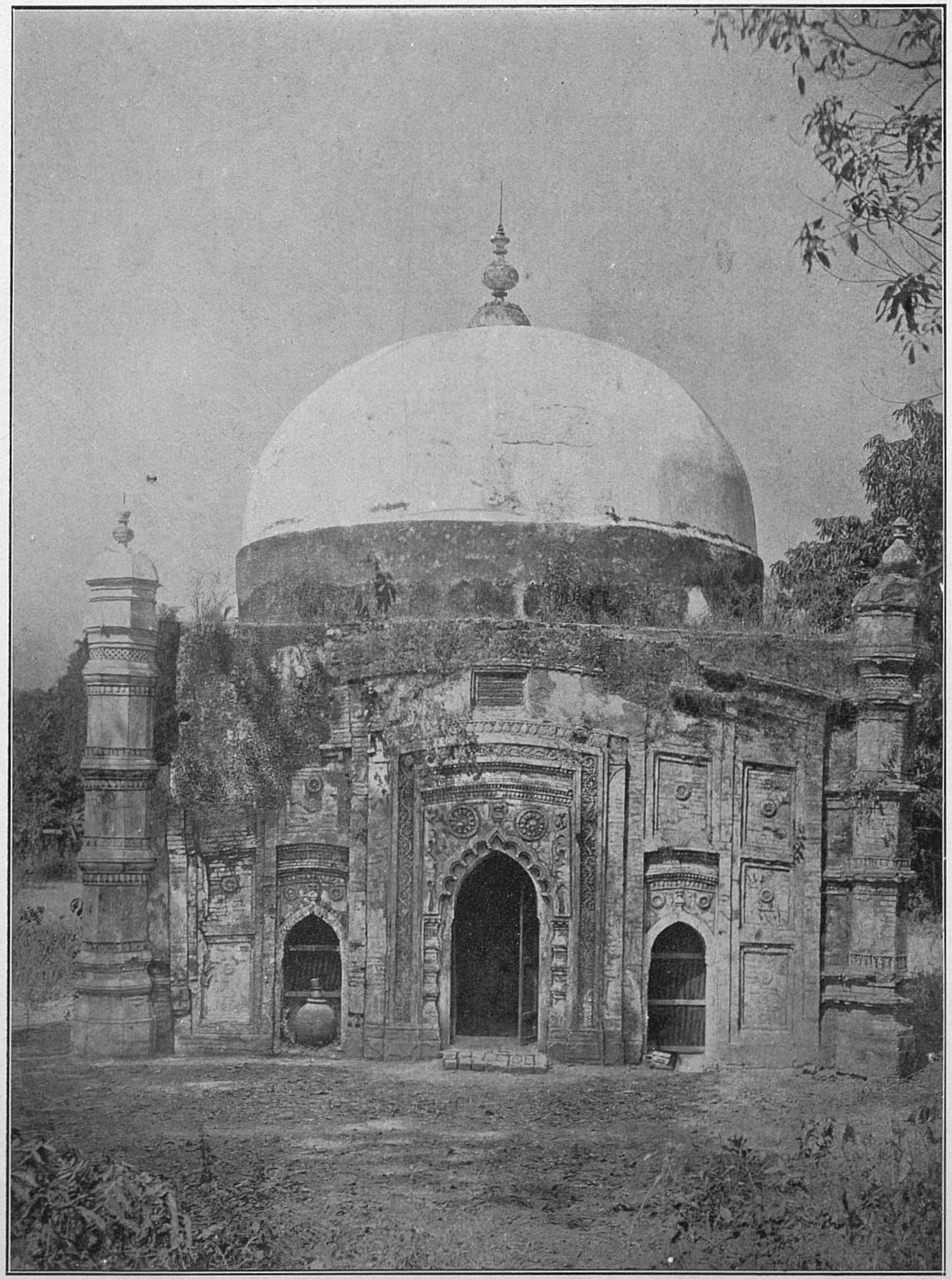


b. SARNATH: MONASTERY III, AFTER CONSERVATION, FROM N.-E.

Photo.-engraved & printed at the Offices of the Survey of India, Calcutta, 1920.

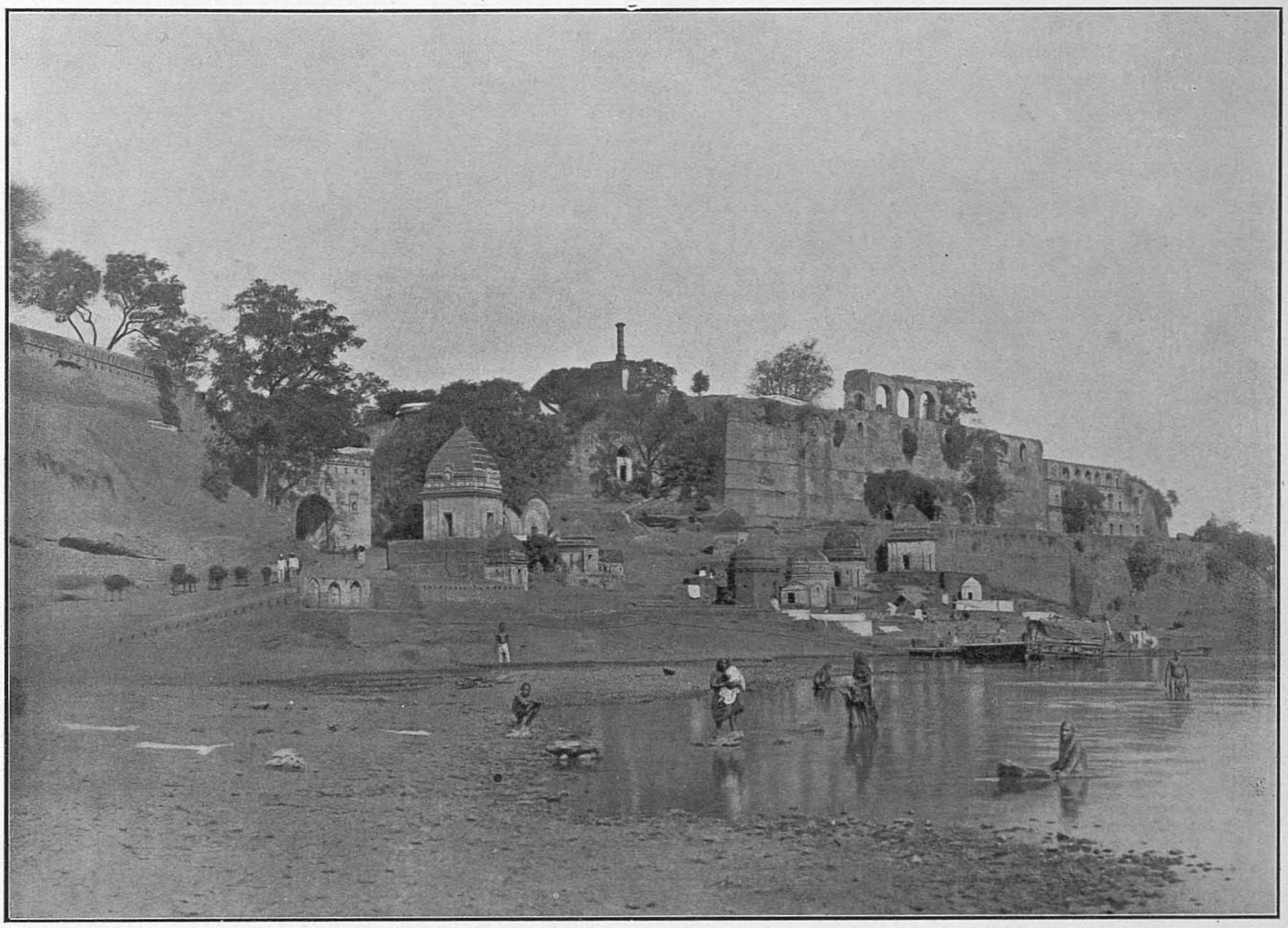


a. TOMB IN THE DUTCH CEMETERY, FROM NORTH, AT KALIKAPUR, DISTRICT MURSHIDABAD.



b. SADI MOSQUE AT AGARSINDUR, DISTRICT MYMENSING.

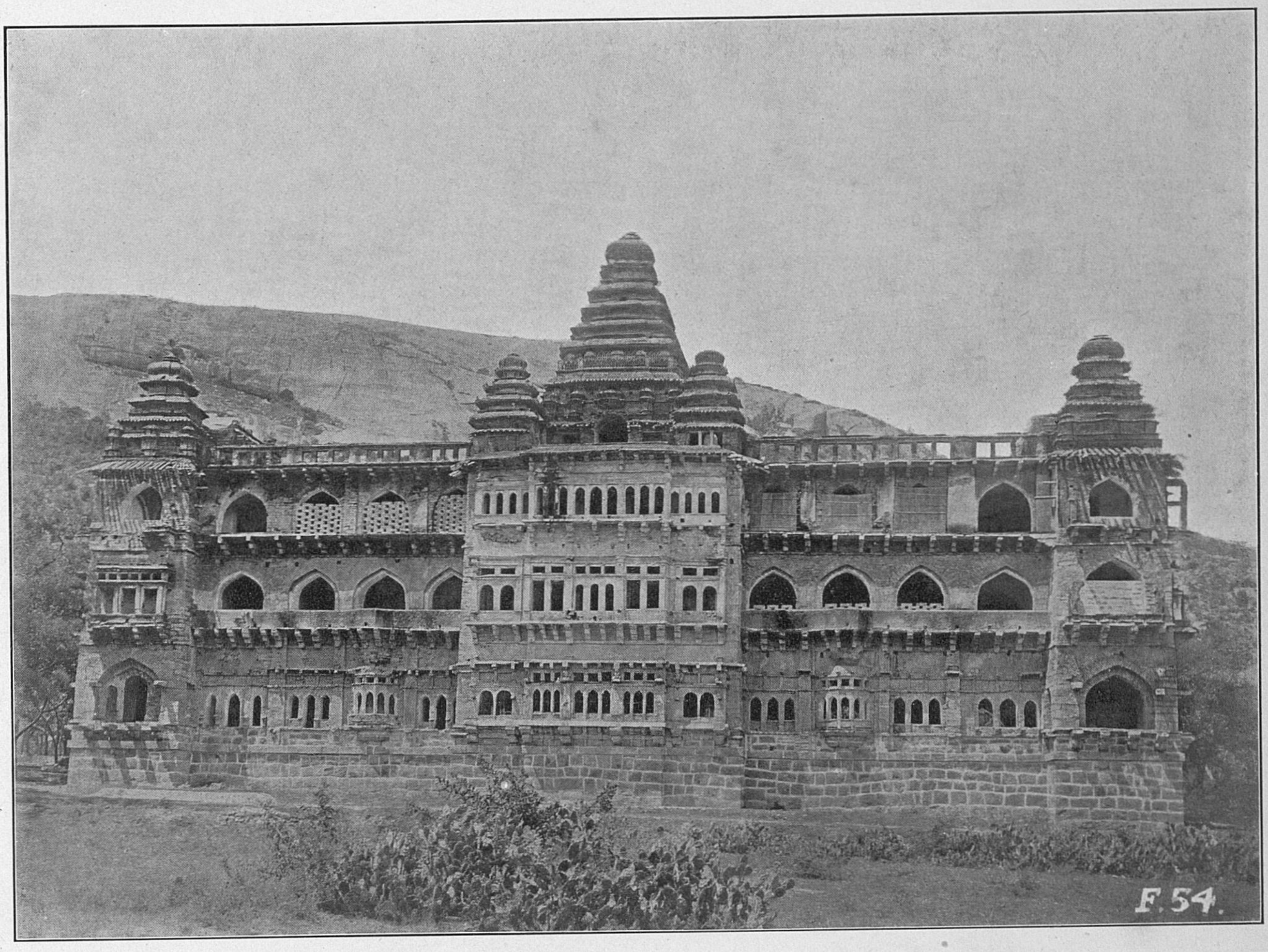
Photo.-engraved & printed at the Offices of the Survey of India, Calcutta, 1920



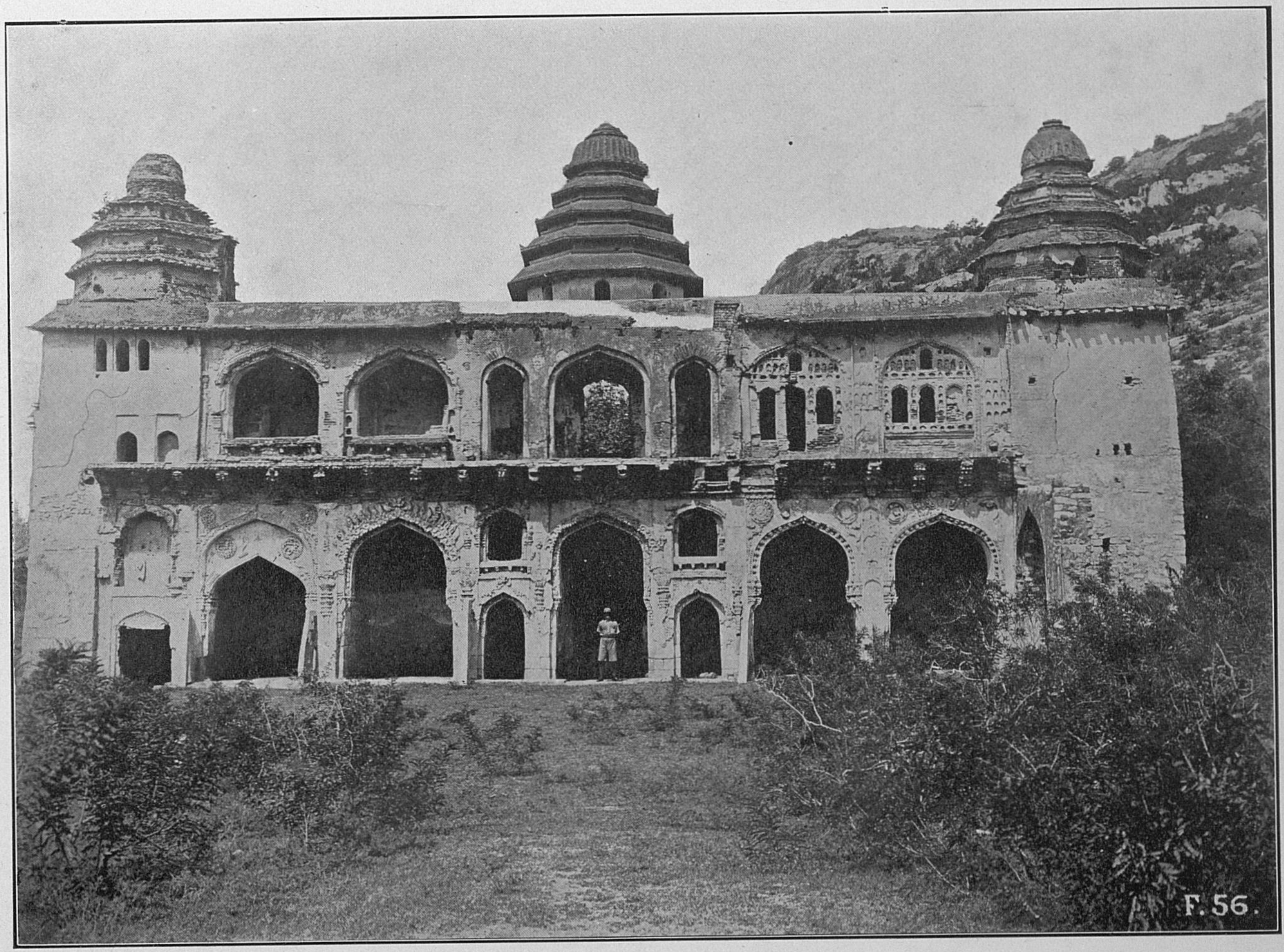
a. GENERAL VIEW OF THE FORT, RIVER SIDE, AT BURHANPUR, DISTRICT NIMAR.

b. NEARER VIEW OF PALACE INSIDE THE FORT AT BURHANPUR, DISTRICT NIMAR.

Photo.-engraved & printed at the Offices of the Survey of India, Calcutta, 1920.

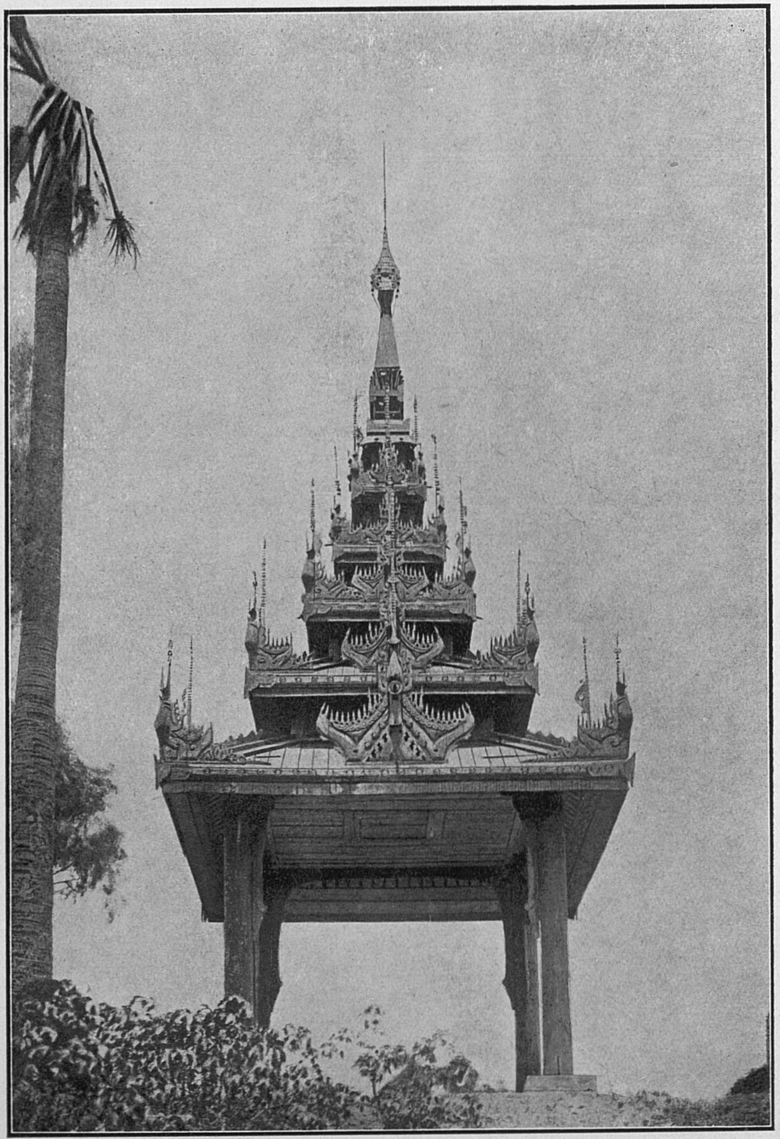


a. KING'S PALACE, SOUTH ELEVATION, CHANDRAGIRI, CHITTOOR.

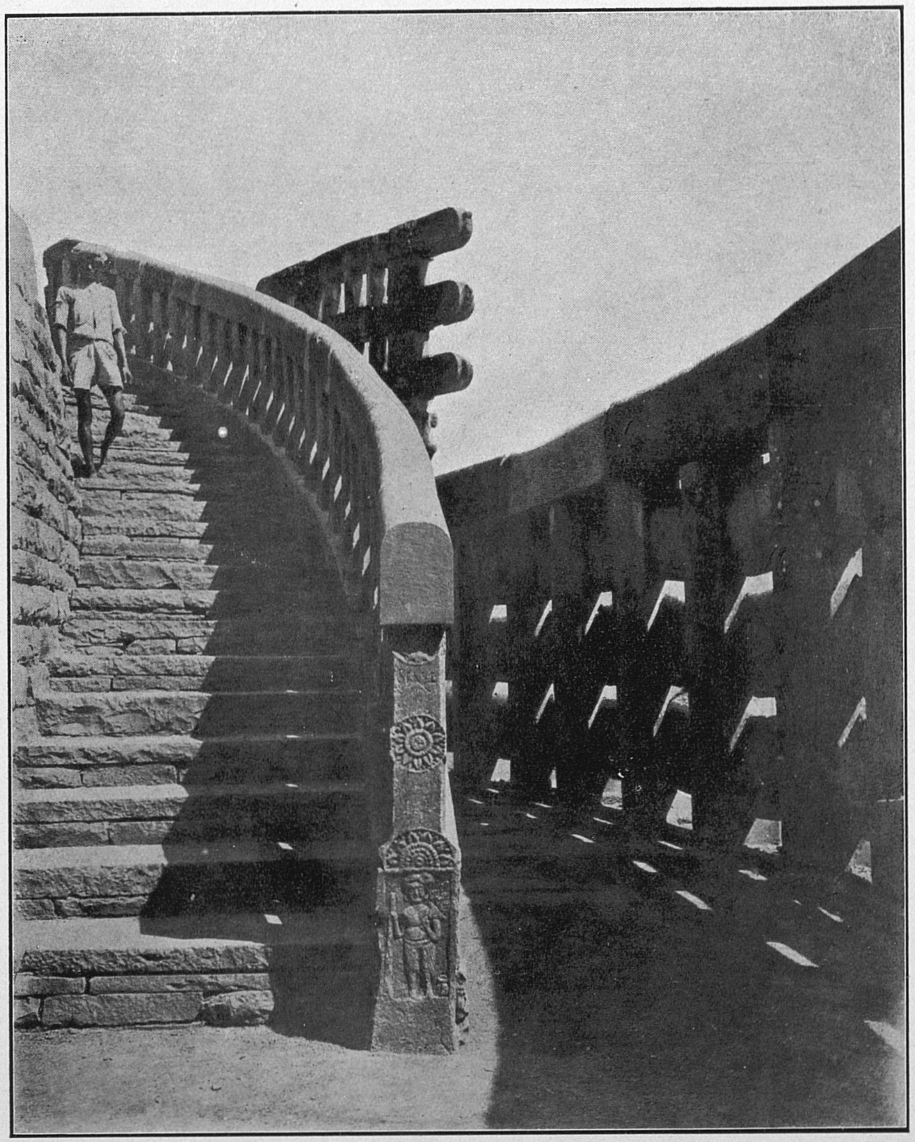


b. QUEEN'S PALACE, FRONT ELEVATION, CHANDRAGIRI, CHITTOOR.

Photo.-engraved & printed at the Offices of the Survey of India, Calcutta, 1920.

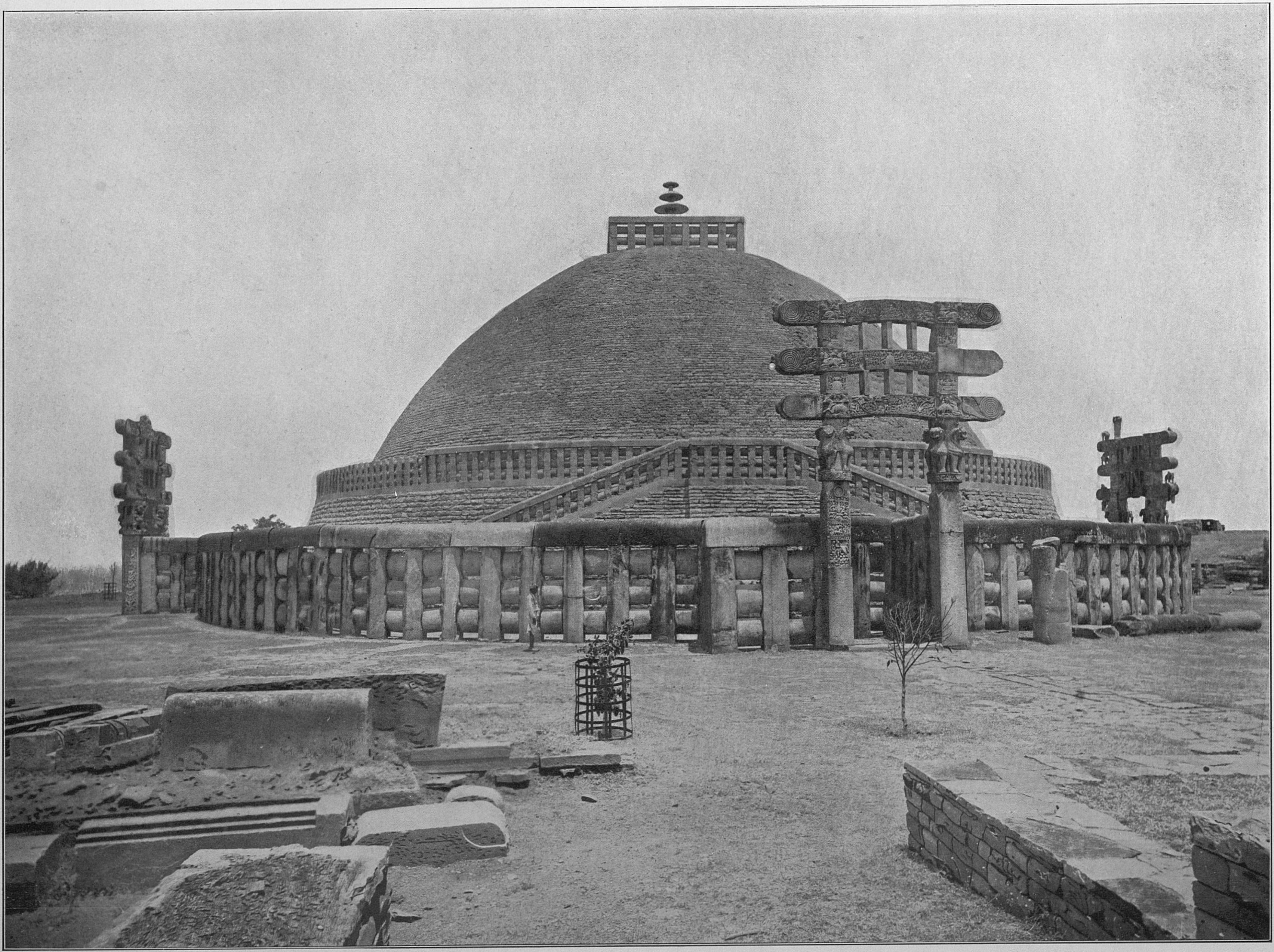


a. PYATTHAT NO. 41, FORT WALLS, MANDALAY.



b. MAIN STAIRCASE, GREAT STUPA, SANCHI.

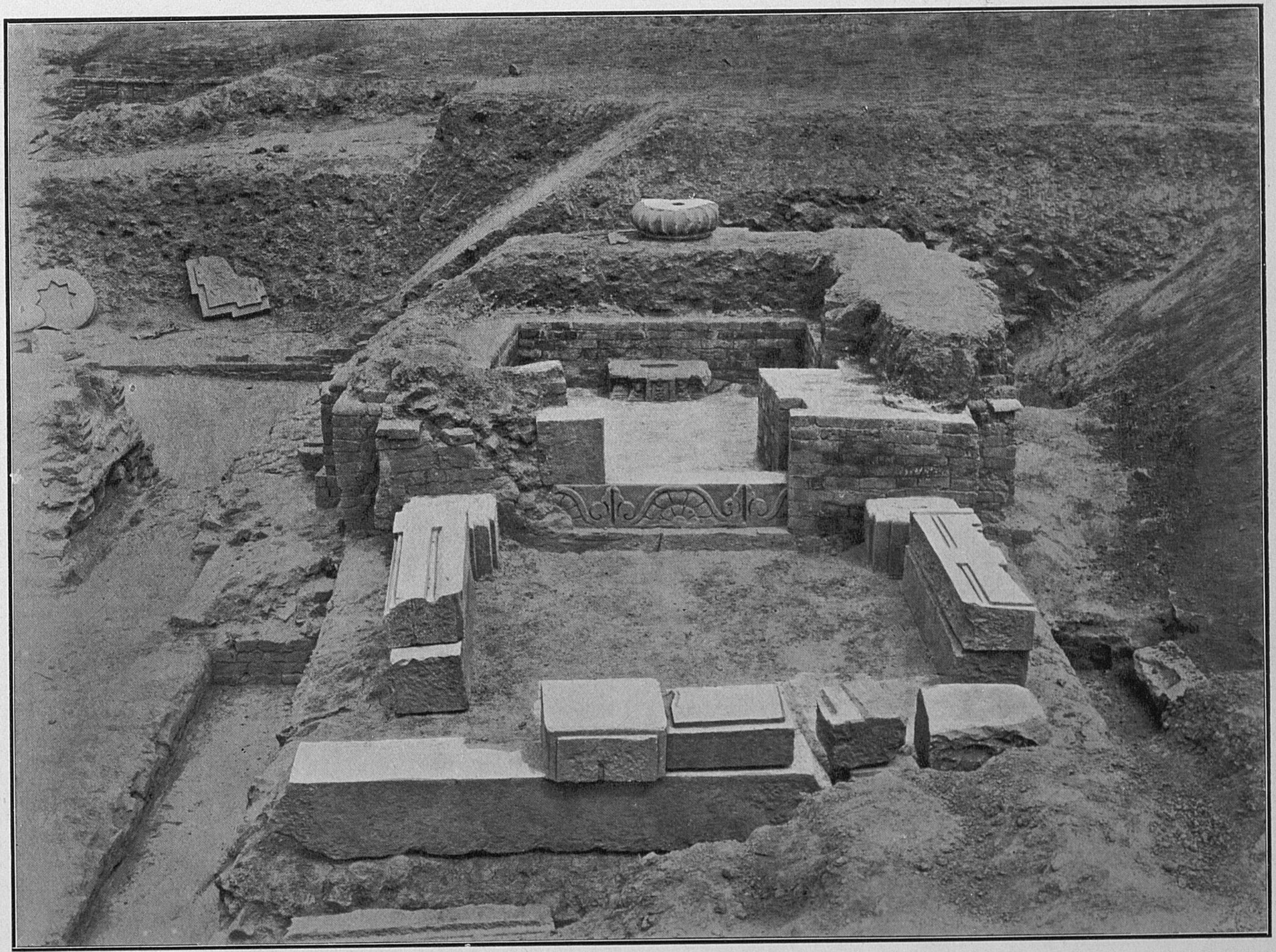
Photo.-engraved & printed at the Offices of the Survey of India, Calcutta, 1920.



THE GREAT STUPA AT SANCHI, RESTORATION OF THE BERM RAILING IN PROGRESS.

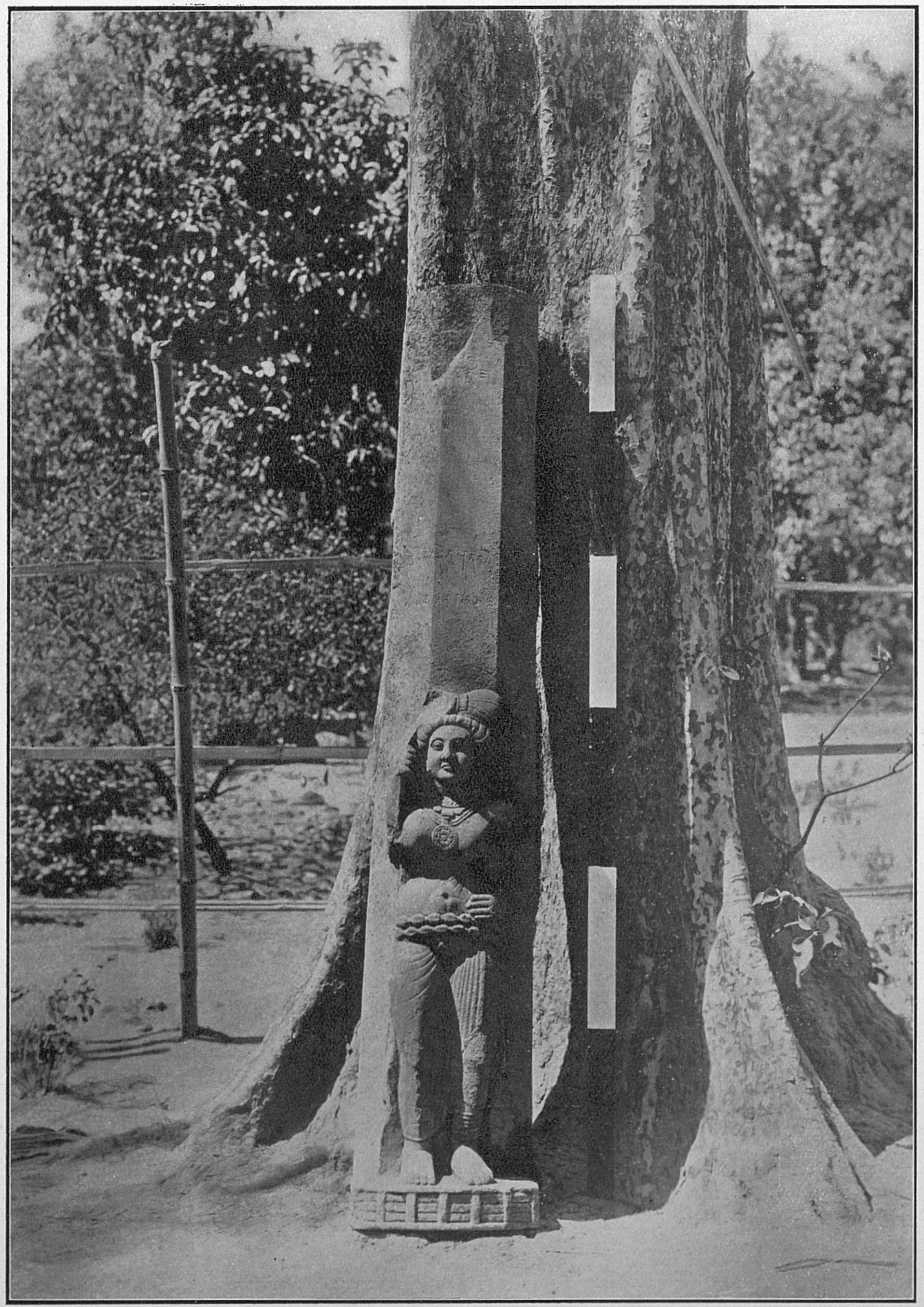
Photo.-engraved & printed at the Offices of the Survey of India, Calcutta, 1920.

a. SARNATH: EXCAVATIONS IN EASTERN PORTION OF ENCLOSURE OF MAIN SHRINE, VIEW AFTER EXCAVATION AND CONSERVATION, FROM S.-W.



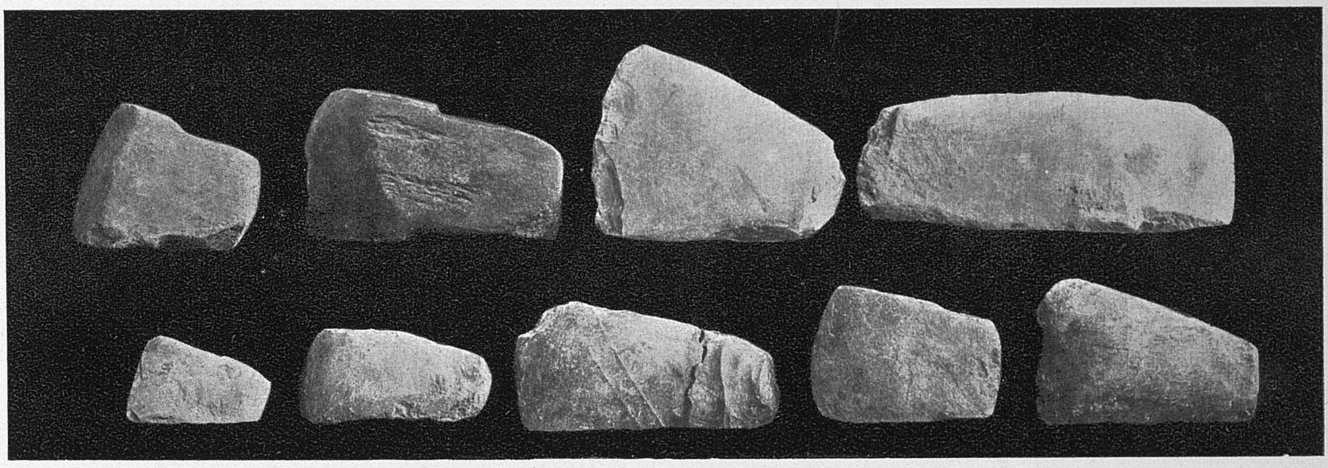
b. SARNATH: EXCAVATIONS IN EASTERN PORTION OF ENCLOSURE OF MAIN SHRINE, VIEW OF BUDDHIST TEMPLE AFTER CONSERVATION, FROM W.

a. IMAGE OF VAJRASATTVA UNEARTHED AT SARNATH.



b. SUNGA COLUMN AT RAJASAN.

Photo.-engraved & printed at the Offices of the Survey of India, Calcutta, 1920.



a. STONE AXE-HEADS FOUND NEAR KYAUKSAUK VILLAGE, MYAING TOWNSHIP, PAKOKKU DISTRICT.

b. GLAZED EARTHENWARE BOWLS AND VASES FOUND AT ANKARE, KYAIKMARAW TOWNSHIP, AMHERST DISTRICT.

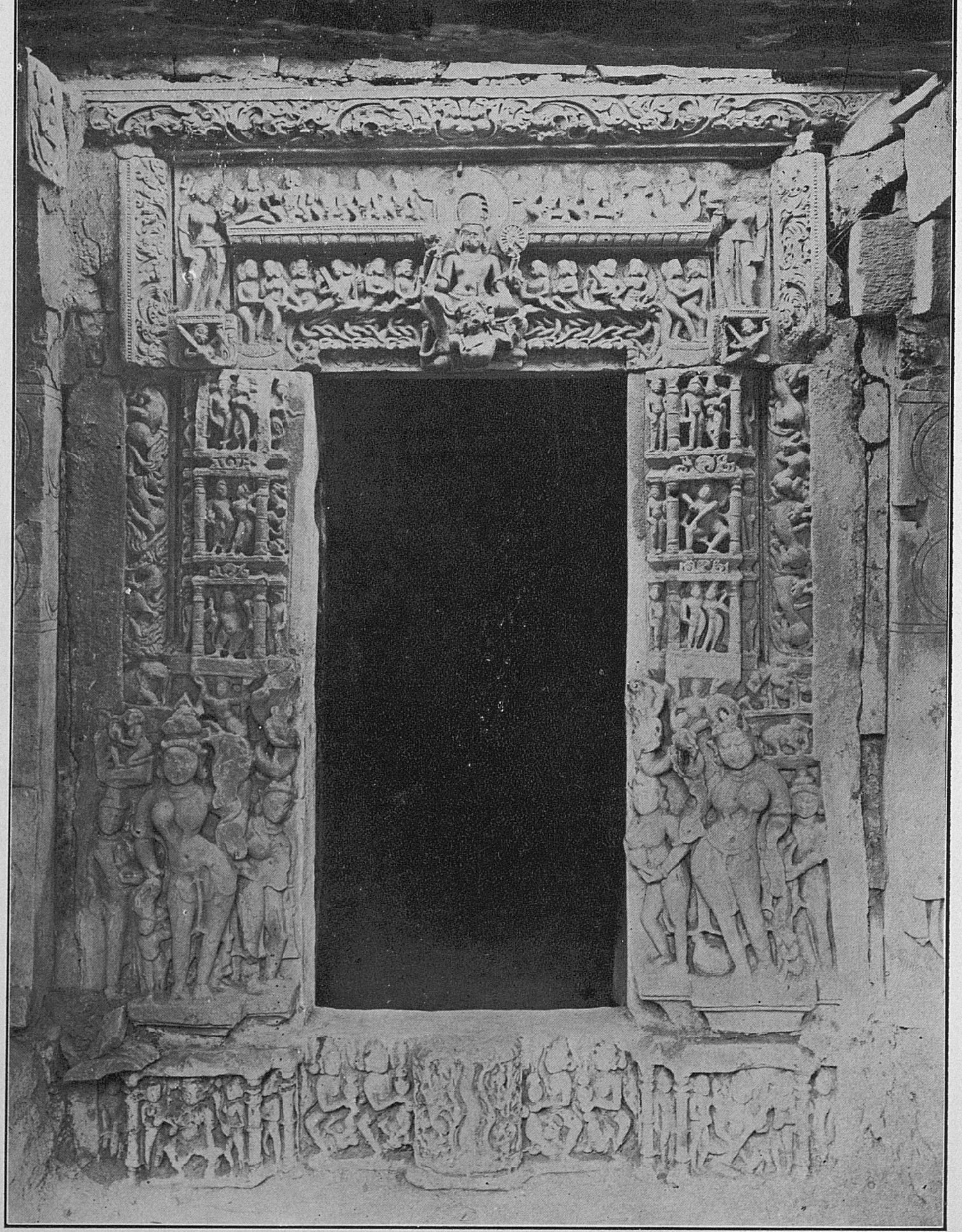
Photo.-engraved & printed at the Offices of the Survey of India Calcutta, 1920.

a.

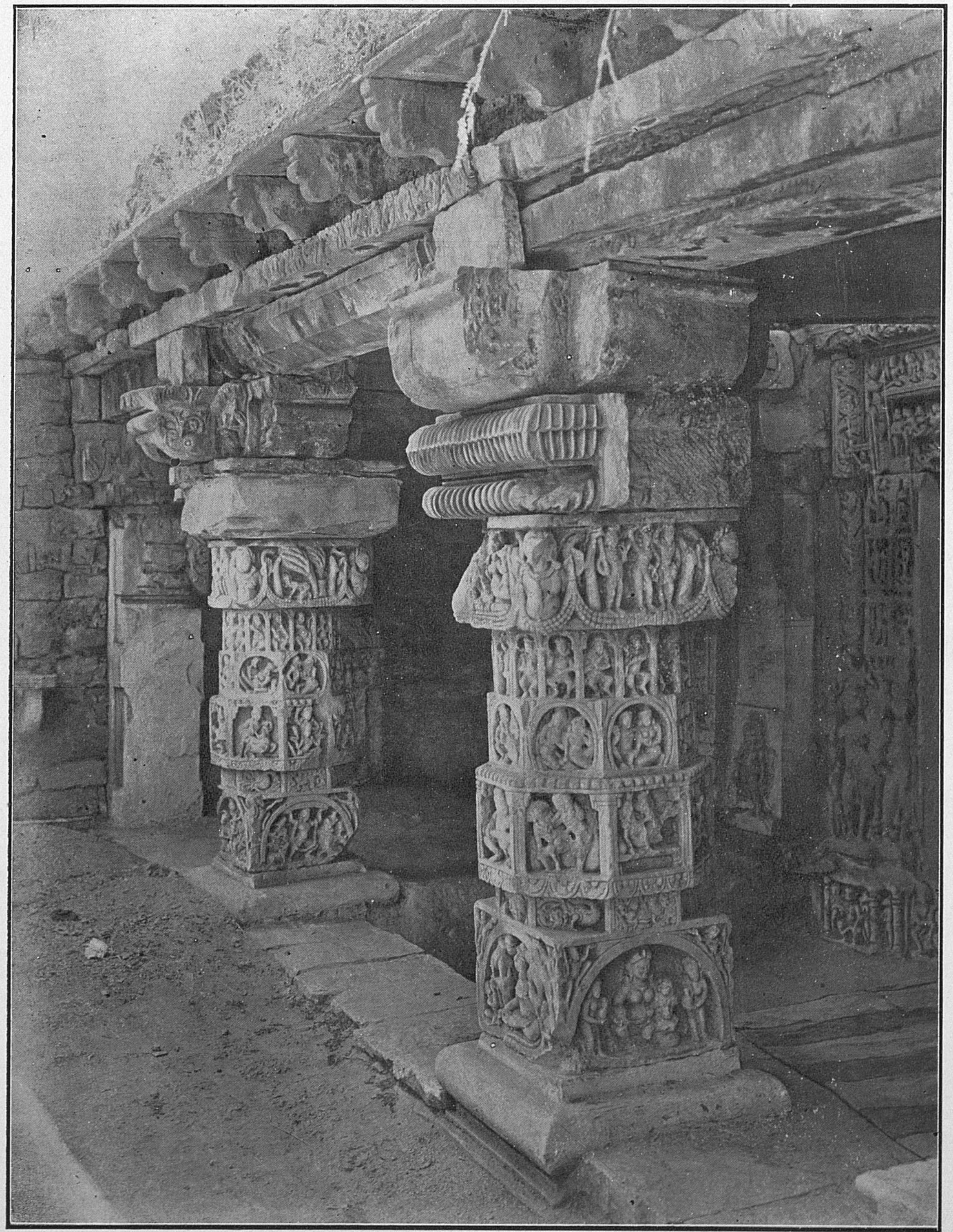
b.

a. & *b.* TILES FROM THE SITE OF HARICHAND RAZ, NEAR HARVAN, (KASHMIR).

Photo.-engraved & printed at the Offices of the Survey of India, Calcutta, 1920.



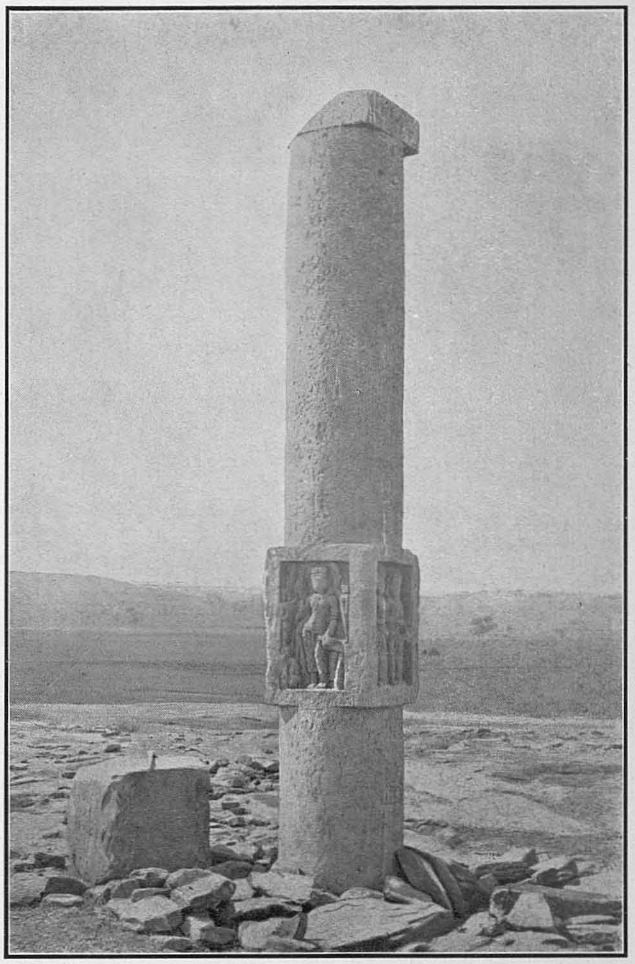
a. A DOOR FRAME IN VINDHYAVASINI DEVI TEMPLE AT TUMAIN, GWALIOR STATE.



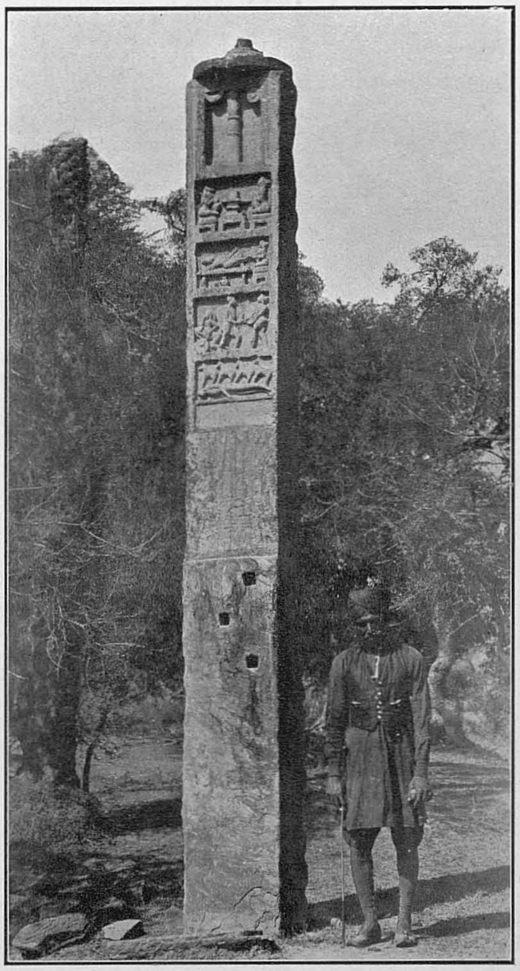
b. TWO PILLARS IN THE VINDHYAVASINI DEVI TEMPLE AT TUMAIN, GWALIOR STATE.

Photo.-engraved & printed at the Offices of the Survey of India, Calcutta, 1920.

a. IMAGE OF BALARAMA AT TUMAIN, GWALIOR STATE.



b. AN INSCRIBED MONOLITH AT TILORI, GWALIOR STATE.



c. A TALL SATI PILLAR AT KOLARAS, GWALIOR STATE.

d. IMAGE OF KARTIKEYA AT RANOD, GWALIOR STATE.

a. TORSO OF TERRACOTTA STATUE (PIR SULTAN).

b. PILLAR OF GROUND BALUSTRADE (MUNDA).

Photo.-engraved & printed at the Offices of the Survey of India, Calcutta, 1926.